SRW-5000/5500 Operations Training

SRW-5000 Support

POSC - Product Operations Helpline

8am – 8pm Eastern Time, Mon-Fri

800-883-6817 option 2-5-2

SRW-5000/5500 Operations Training

ANALOG I/O
AUDIO OUTPUT
CH1
CH2
CH3
CH4
REF INPUT
1
2 (OPTION)
OFF
ON
OFF
ON
75Ω
75Ω
MONITOR OUTPUT
R
L
TIME CODE
IN
OUT
CUE
OUT
HD REF. OUT
1
2
SD OUT
SYNC
COMPOSITE
DIGITAL I/O (AES/EBU)
INPUT
AUDIO
CH1/2
CH3/4
CH5/6
CH7/8
CH9/10
CH11/12
OUTPUT
AUDIO
CH1/2
CH3/4
CH5/6
CH7/8
CH9/10
CH11/12
REMOTE 2 PARALLEL I/O(50P)
REMOTE 1-IN(9P)
REMOTE 1-I/O(9P)
RS232C
VIDEO CONTROL
USB
ETHERNET
SONY®
MODEL SRW-5000
HD DIGITAL VIDEOCASSETTE RECORDER
AC100-240V 50/60Hz
No. 1001
Sony Corporation
Made in Japan
CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
ATTENTION
RISQUE DE CHOC ELECTRIQUE NE PAS OUVRIR
DIGITAL I/O
HD SDI INPUT
A
B(OPTION)
INPUT MONITOR
INPUT MONITOR
HD SDI OUTPUT
1
2
MONITOR
A
A
A
B(OPTION)
B(OPTION)
B(OPTION)
FORMAT CONV. OUT (OPTION)
MONITOR
1
2
SD SDI OUT
1
2
MONITOR
AC IN

INFORMATION DISPLAY

Press buttons to access different menu screens

Press SFT (on number pad) + DIAG to access DIAG menu

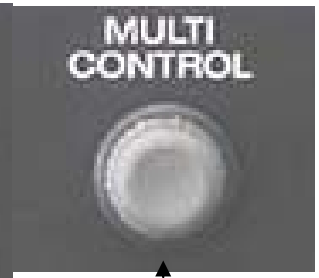
Press to access ALTERNATE pages of menu screens

PB level button

Rec level button

Right monitor buttons

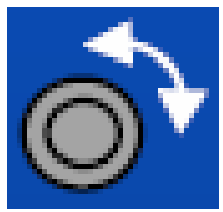
Left monitor buttons

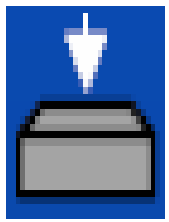


Multi Control Knob

ROTATE

PUSH TO ENTER OR PRESET



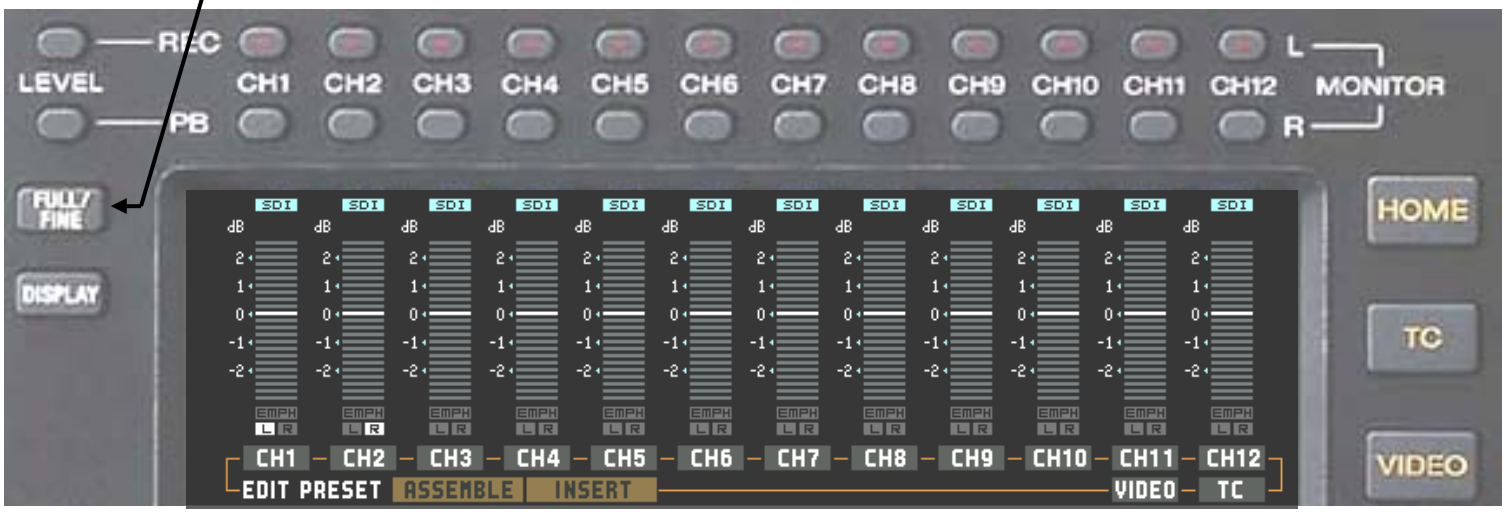


Function buttons

Full / Fine button

Full: 0dB ~ -60dB or +20dB ~ -40dB.
Depends on setting of menu 814: LEVEL METER SCALE

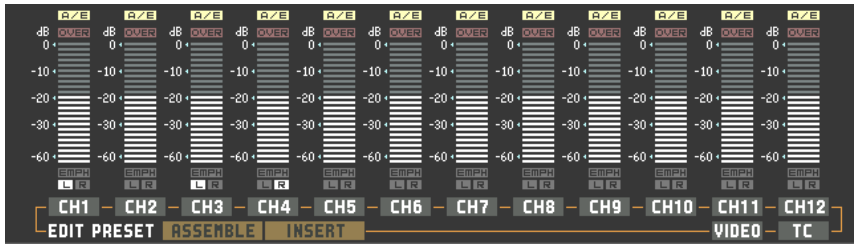
Fine: Scale is 0.25dB per division.



Press DISPLAY button to view image.

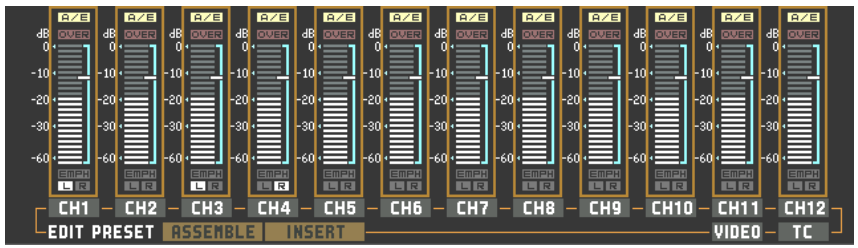
Aspect ratio follows downconverter setting (Edge Crop, Squeeze, Letterbox).

HOW TO ADJUST PLAYBACK LEVELS



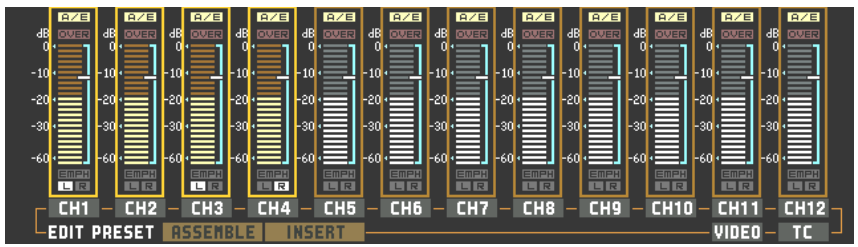
Normal audio display.

Press PB LEVEL button.

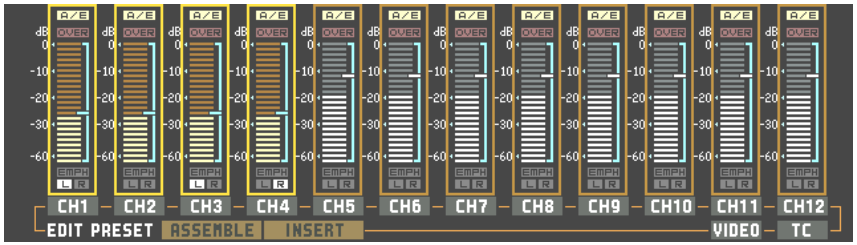


Each channel now has a ‘dark orange’ border.
There is also a BLUE vertical bar to the right hand side of each channel.
This indicates that it is the PB channels are to be adjusted.

Select the audio channels to be adjusted using the bottom row of CH1 ~ CH12 buttons.

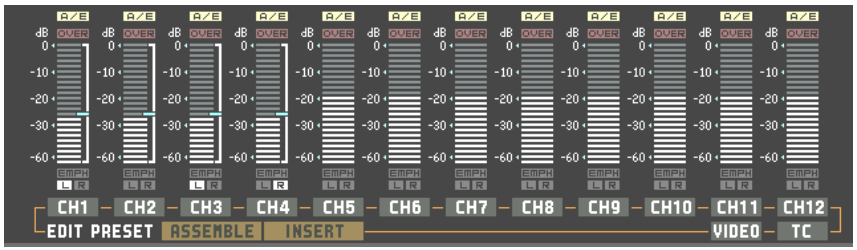


For example: PB CH1 ~ CH 4



Rotate MULTI CONTROL KNOB to adjust the level of CH1 ~ CH4.

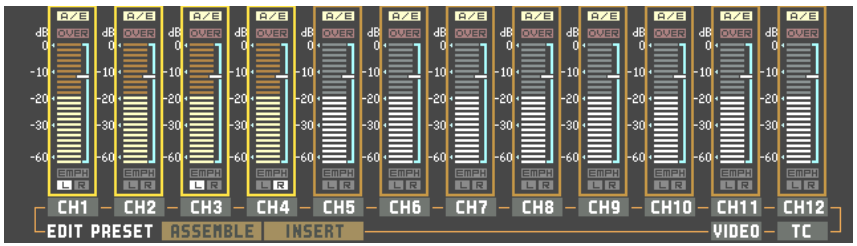
Press PB LEVEL button to SET the level.



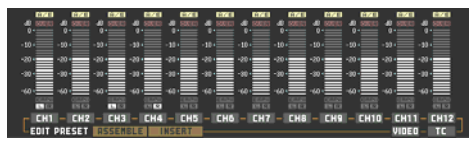
There is a WHITE vertical bar to the right hand side of each adjusted channel.
This indicates that these PB channels have been adjusted.

To reset levels back to PRESET value.
Press PB LEVEL button.

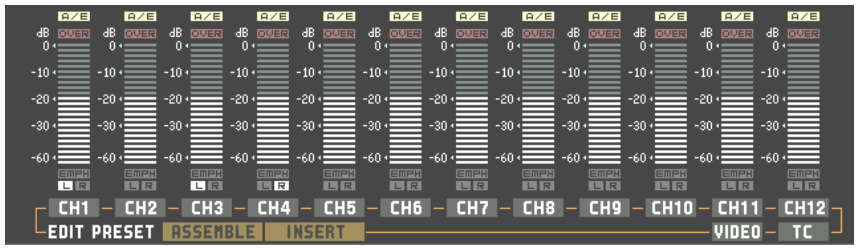
Select the audio channels to be reset using the lower row of CH1 ~ CH12 buttons.



Press the MULTI CONTROL KNOB.

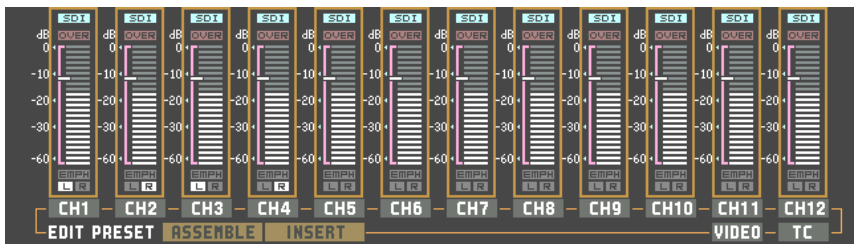


HOW TO ADJUST RECORD LEVELS



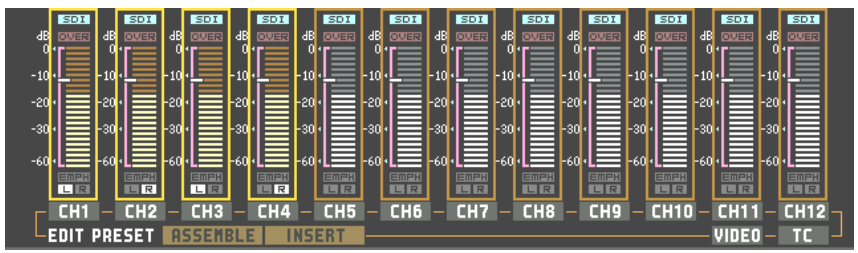
Normal audio display.

Press REC LEVEL button.

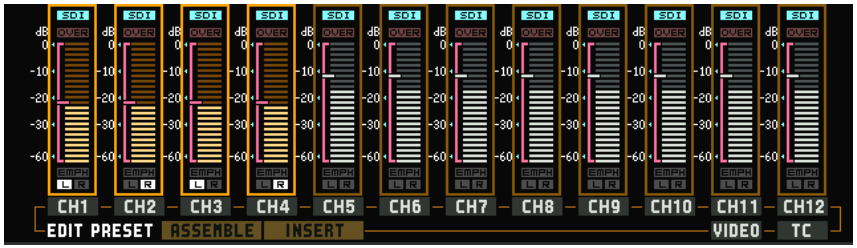


Each channel now has a ‘dark orange’ border.
There is also a PINK vertical bar to the left hand side of each channel.
This indicates that it is the REC channels are to be adjusted.

Select the audio channels to be adjusted using the upper row of CH1 ~ CH12 buttons.

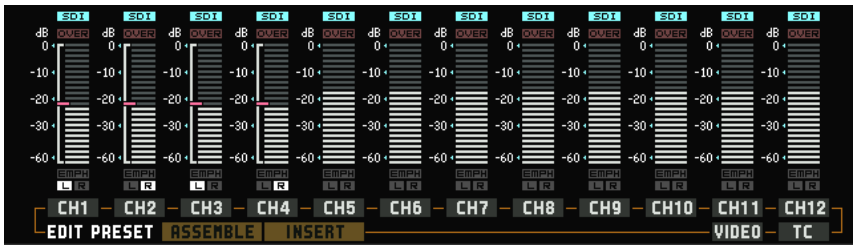


For example: REC CH1 ~ CH 4



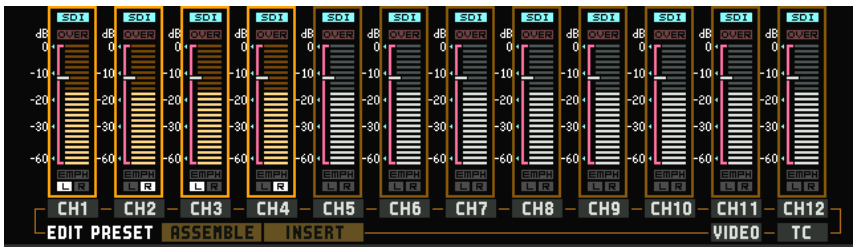
Rotate MULTI CONTROL KNOB to adjust the level of CH1 ~ CH4.

Press REC LEVEL button to SET the level.



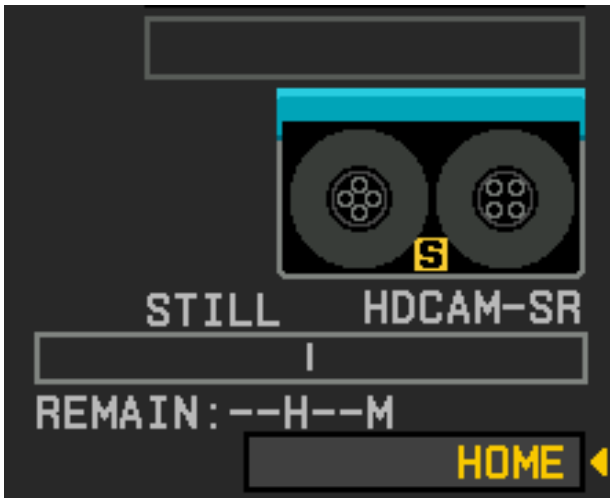
There is a WHITE vertical bar to the left hand side of each adjusted channel.
This indicates that these REC channels have been adjusted.

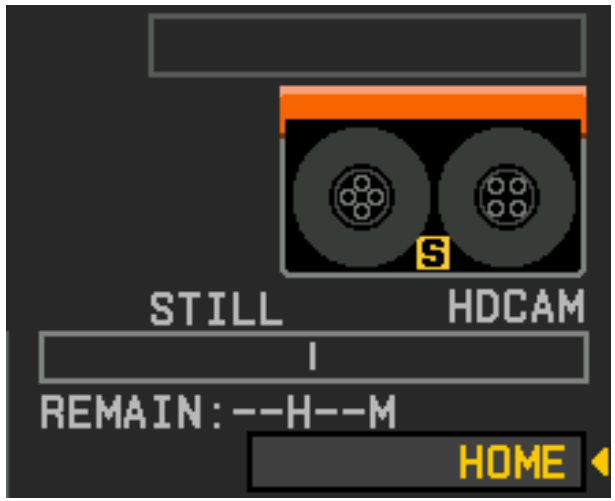
To reset levels back to PRESET value.
Press REC LEVEL button.
Select the audio channels to be reset using the upper row of CH1 ~ CH12 buttons.

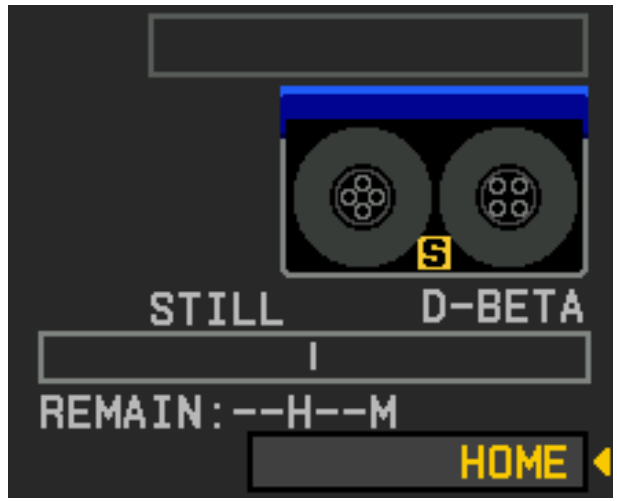


Press the MULTI CONTROL KNOB.

TAPE FORMAT DISPLAY



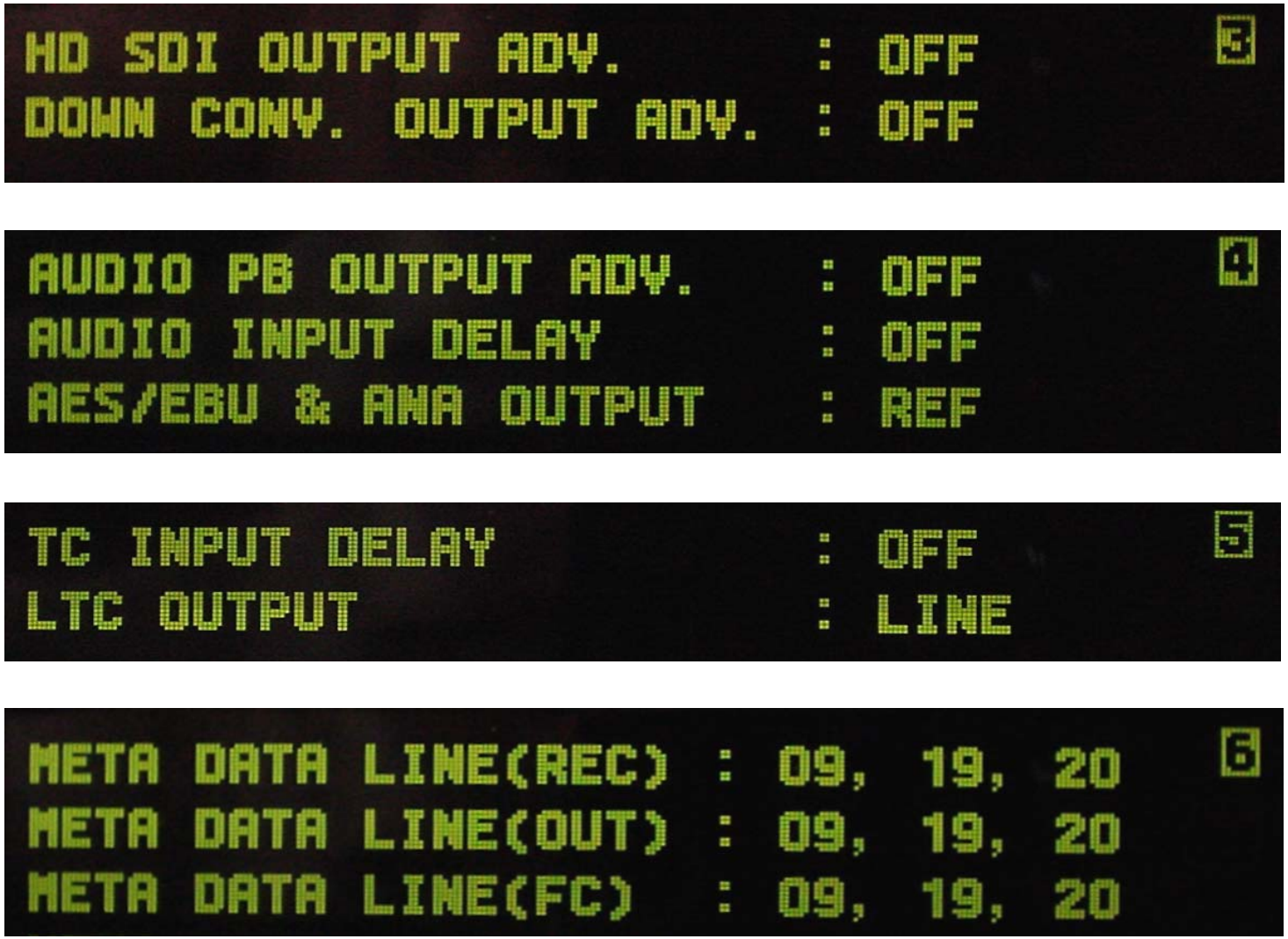




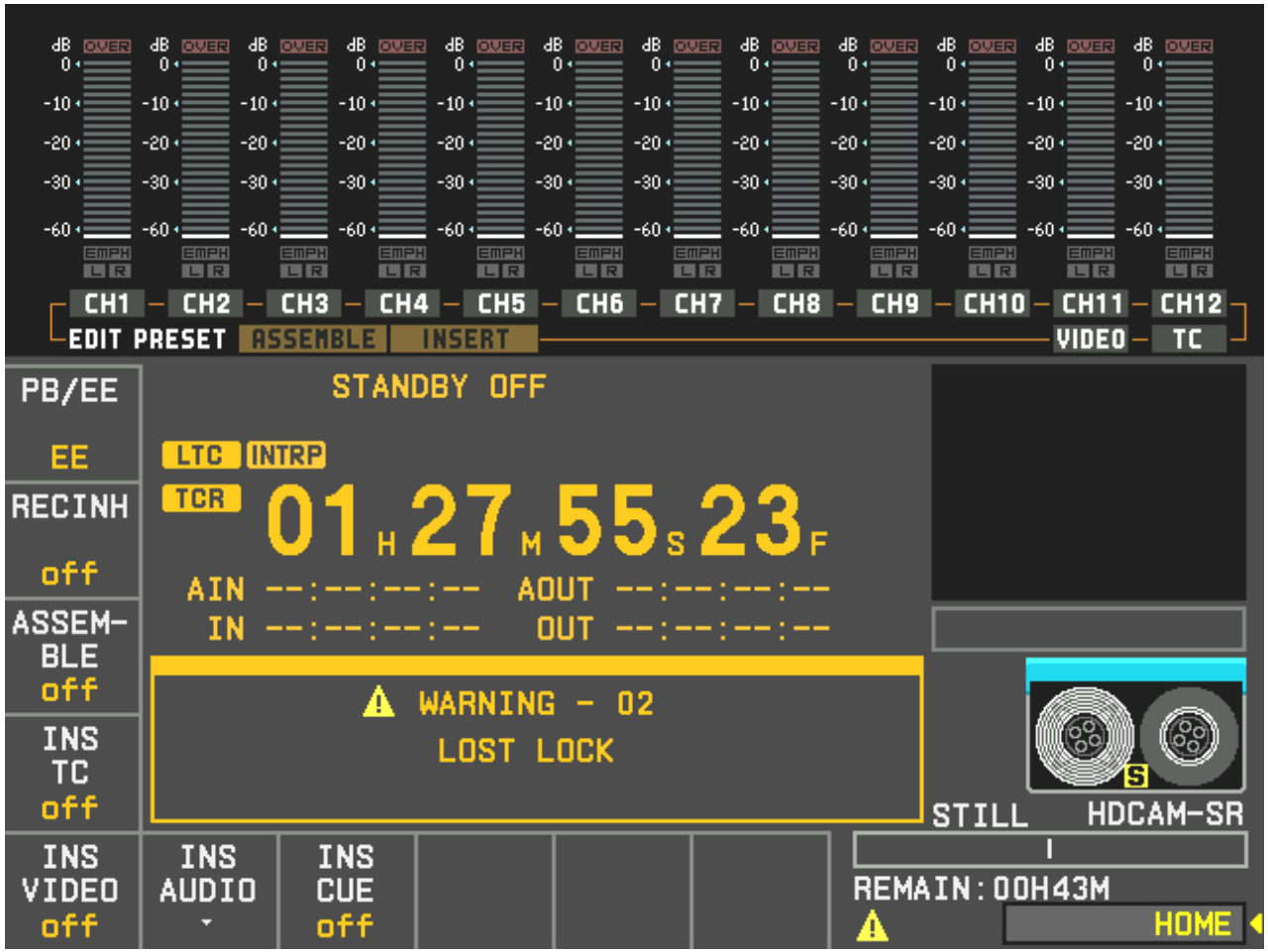
INFORMATION DISPLAY

THIS DISPLAY CONSISTS OF 6 SCREENS OF SETUP INFORMATION

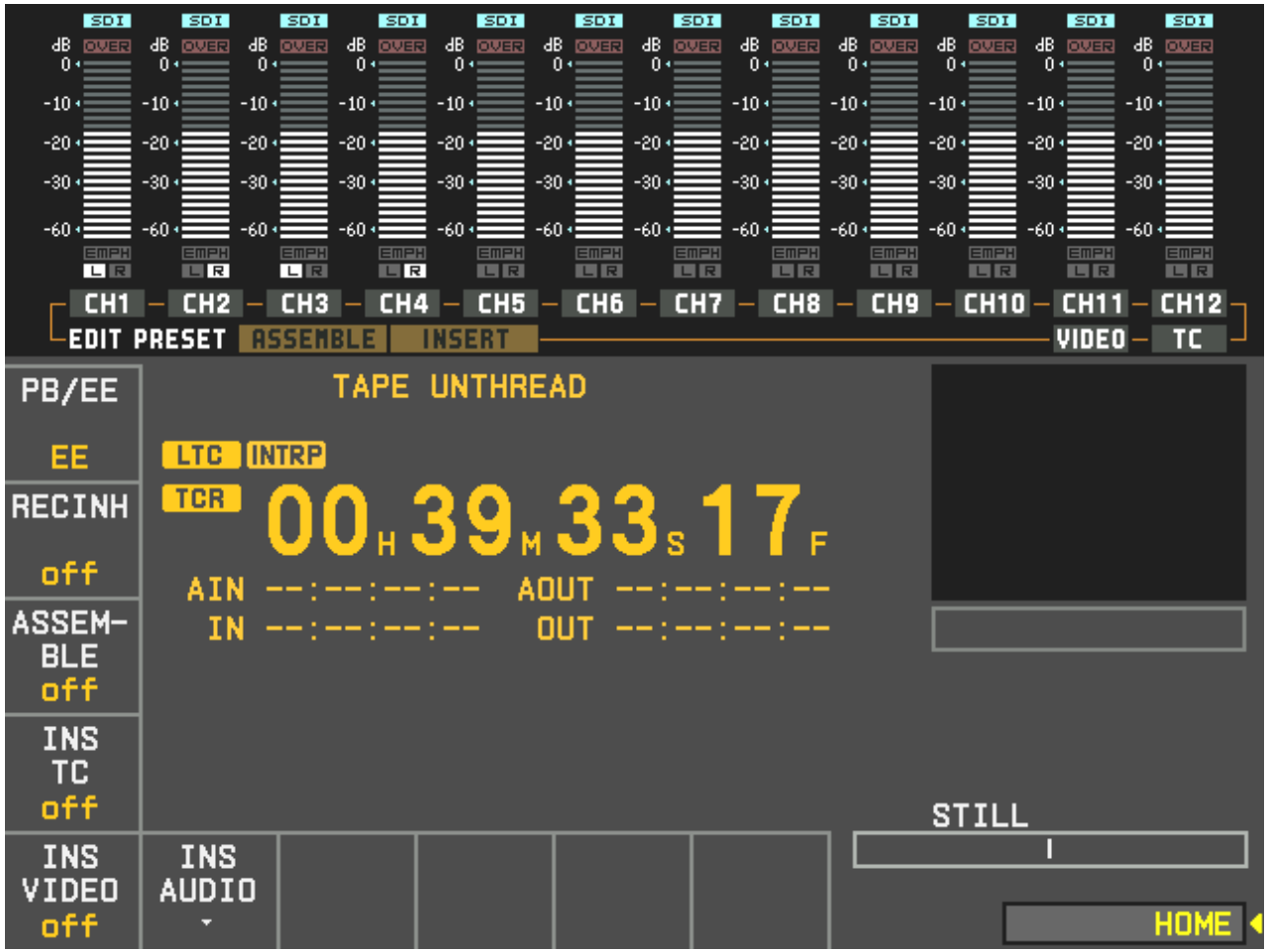
PRESS AND ROTATE THE MULTI CONTROL KNOB TO CHANGE THE DISPLAYED SCREEN


HD SDI OUTPUT ADV. : OFF
DOWN CONV. OUTPUT ADV. : OFF
3
AUDIO PB OUTPUT ADV. : OFF
AUDIO INPUT DELAY : OFF
AES/EBU & ANA OUTPUT : REF
4
TC INPUT DELAY : OFF
LTC OUTPUT : LINE
5
META DATA LINE(REC) : 09, 19, 20
META DATA LINE(OUT) : 09, 19, 20
META DATA LINE(FC) : 09, 19, 20
6

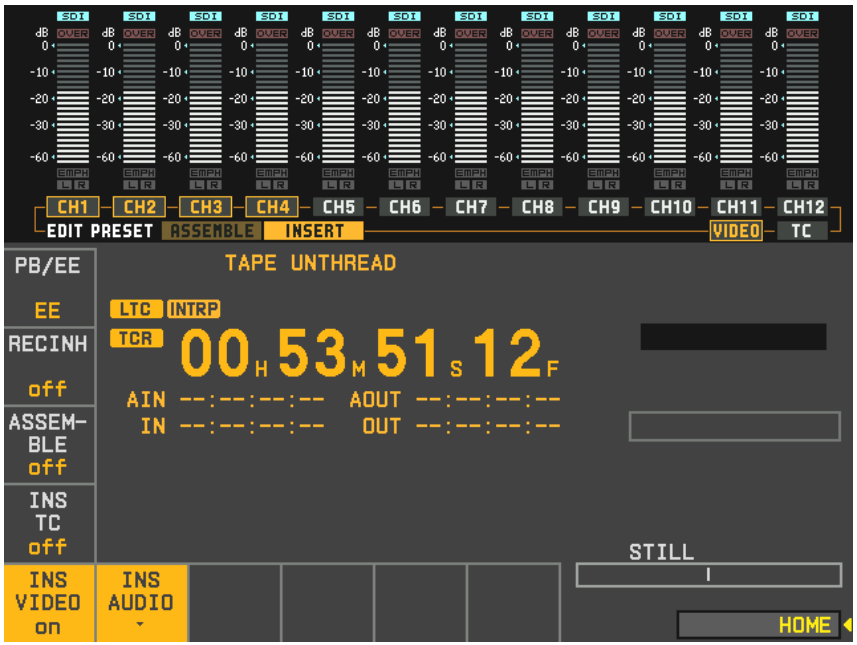
HOME: WARNING MESSAGE

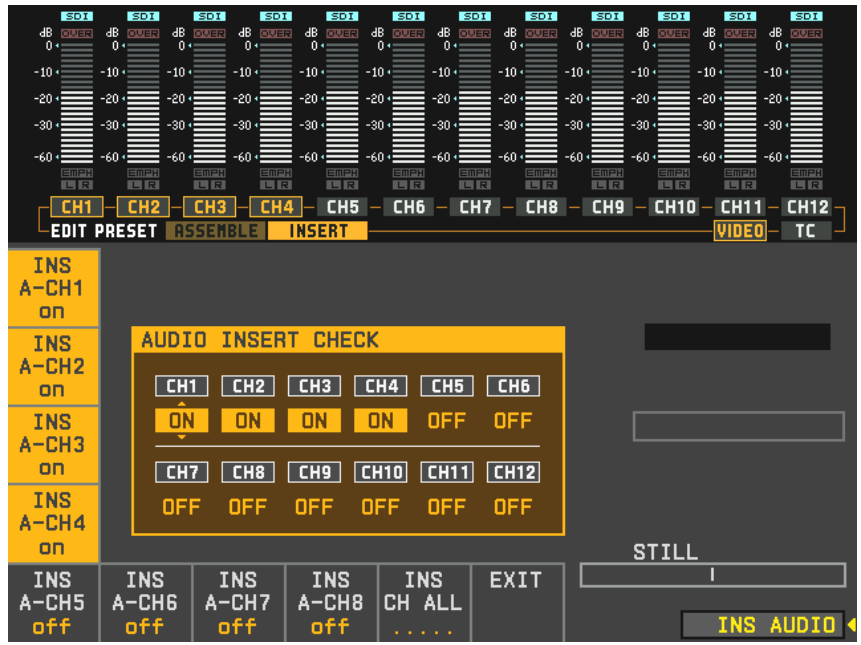


HOME

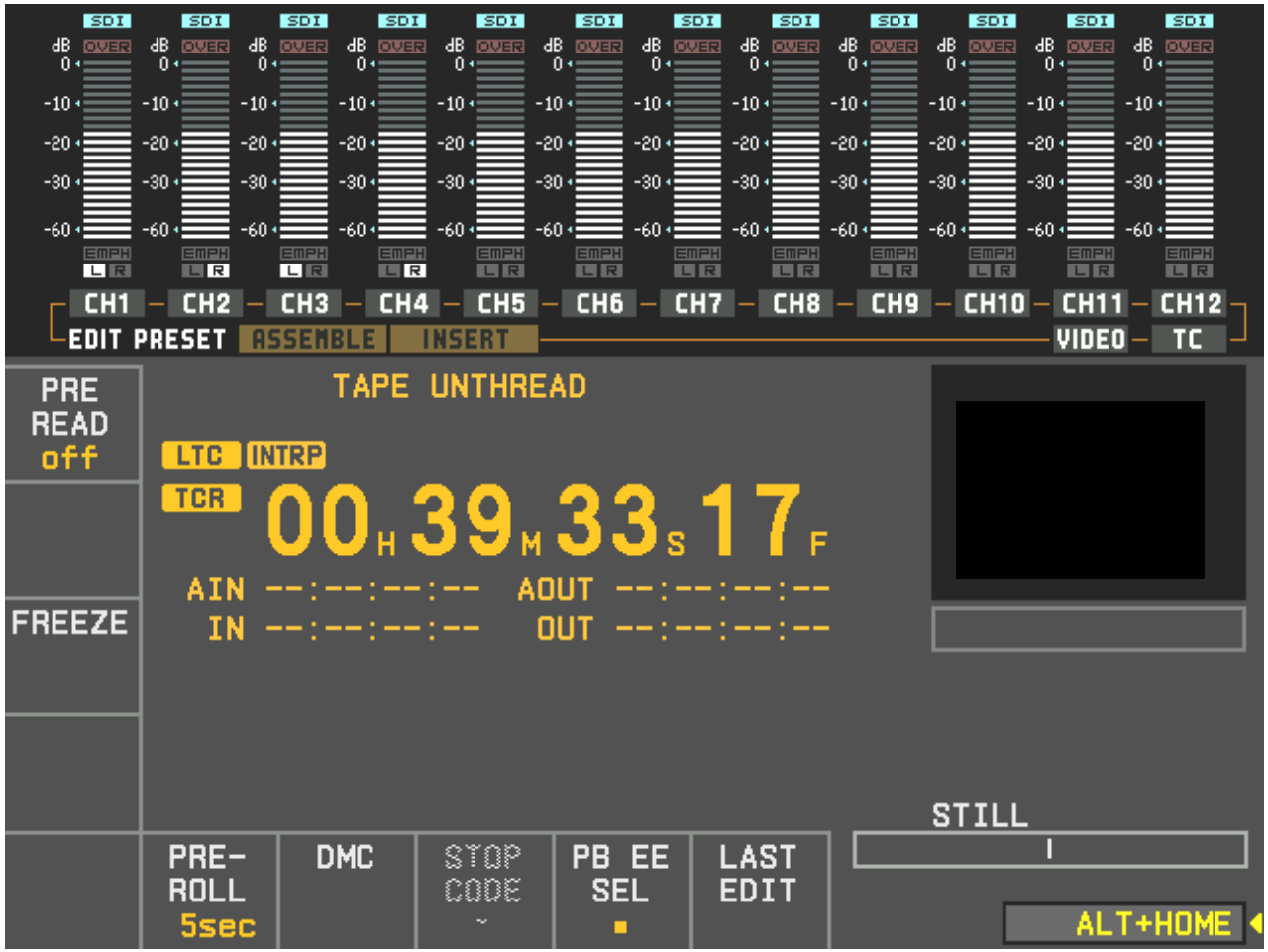

SDI
dB OVER
0
-10
-20
-30
-60
EMPH
L R
CH1 CH2 CH3 CH4 CH5 CH6 CH7 CH8 CH9 CH10 CH11 CH12
EDIT PRESET
ASSEMBLE
INSERT
VIDEO
TC
PB/EE
EE
RECINH
off
ASSEM-
BLE
off
INS
TC
off
INS
VIDEO
off
INS
AUDIO
TAPE UNTHREAD
LTC
INTRP
TCR
00H 39M 33S 17F
AIN --:--:--:--
AOUT --:--:--:--
IN --:--:--:--
OUT --:--:--:--
STILL
HOME

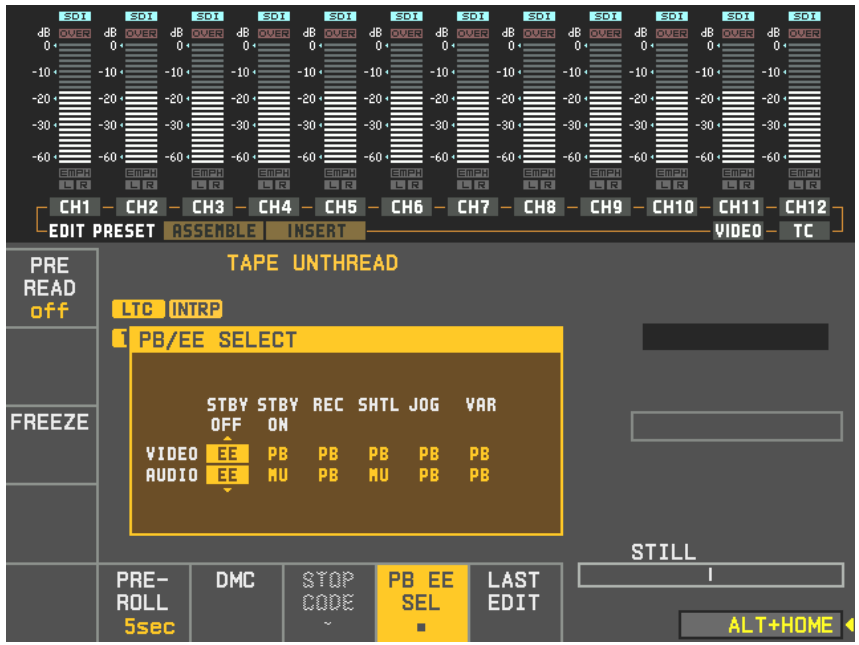
EDIT PRESET PAGES





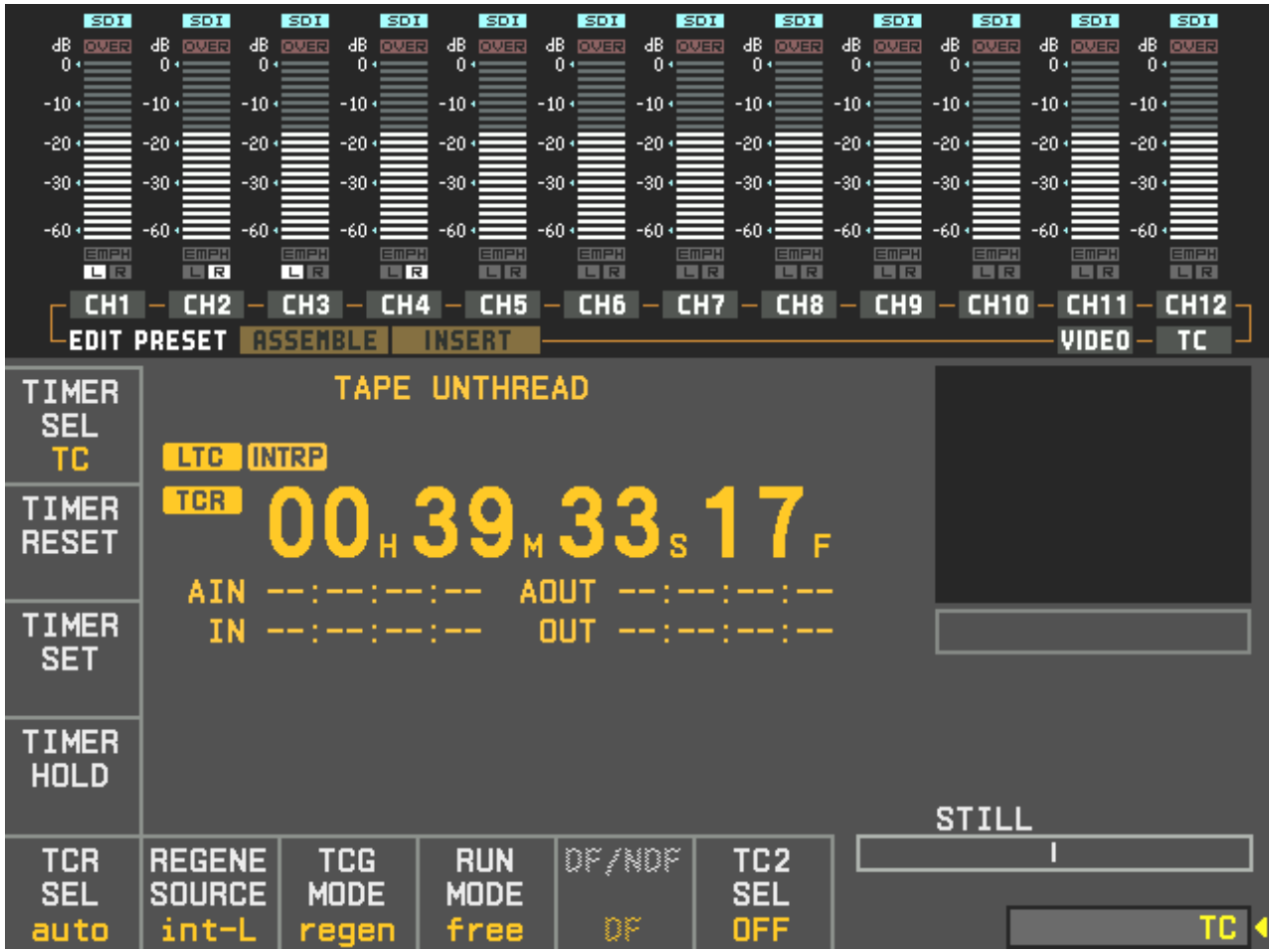
HOME / ALT


SDI
dB
OVER
0
-10
-20
-30
-60
EMPH
L R
CH1 CH2 CH3 CH4 CH5 CH6 CH7 CH8 CH9 CH10 CH11 CH12
EDIT PRESET
ASSEMBLE
INSERT
VIDEO
TC
PRE READ off
TAPE UNTHREAD
LTC
INTRP
TCR
00H 39M 33S 17F
AIN --:--:--:--
AOUT --:--:--:--
IN --:--:--:--
OUT --:--:--:--
FREEZE
STILL
PRE-ROLL 5sec
DMC
STOP CODE
PB EE SEL
LAST EDIT
ALT+HOME

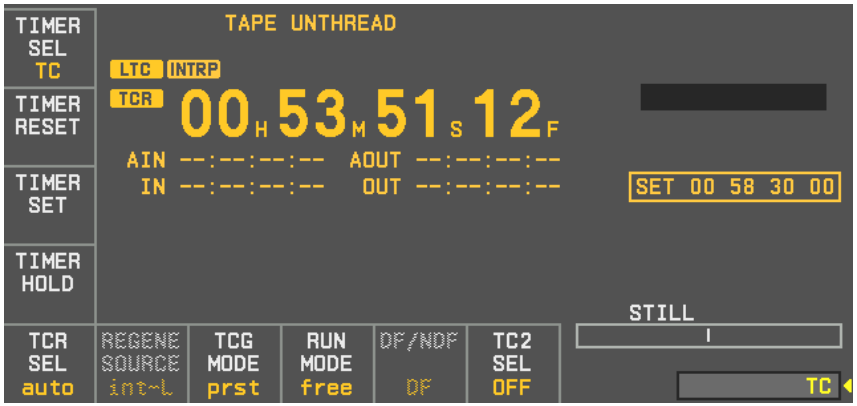

CH1 CH2 CH3 CH4 CH5 CH6 CH7 CH8 CH9 CH10 CH11 CH12
EDIT PRESET ASSEMBLE INSERT
VIDEO TC
PRE READ off
TAPE UNTHREAD
LTC INTRP
PB/EE SELECT
STBY OFF STBY ON REC SHTL JOG VAR
VIDEO EE PB PB PB PB PB
AUDIO EE MU PB MU PB PB
FREEZE
STILL
PRE-ROLL 5sec
DMC
STOP CODE
PB EE SEL
LAST EDIT
ALT+HOME

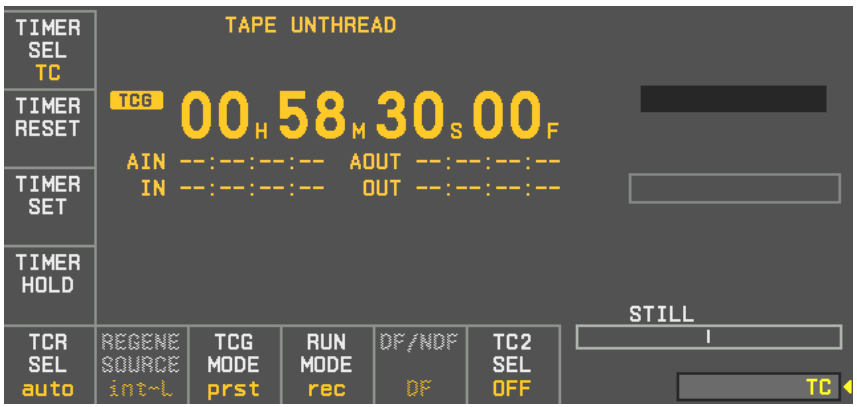
PB/EE SELECT
STBY OFF STBY ON REC SHTL JOG VAR
VIDEO EE PB PB PB PB PB
AUDIO EE MU PB MU PB PB

TC


SDI
dB
OVER
0
-10
-20
-30
-60
EMPH
L R
CH1 CH2 CH3 CH4 CH5 CH6 CH7 CH8 CH9 CH10 CH11 CH12
EDIT PRESET
ASSEMBLE
INSERT
VIDEO
TC
TIMER SEL TC
TIMER RESET
TIMER SET
TIMER HOLD
TAPE UNTHREAD
LTC
INTRP
TCR
00H 39M 33S 17F
AIN --:--:--:--
AOUT --:--:--:--
IN --:--:--:--
OUT --:--:--:--
STILL
TCR SEL auto
REGENE SOURCE int-L
TCG MODE regen
RUN MODE free
DF/NDF DF
TC2 SEL OFF
TC

How to set the timecode generator





TC MENU

Set TC generator as required.
TCG MODE = PRESET
RUN MODE = FREE or REC

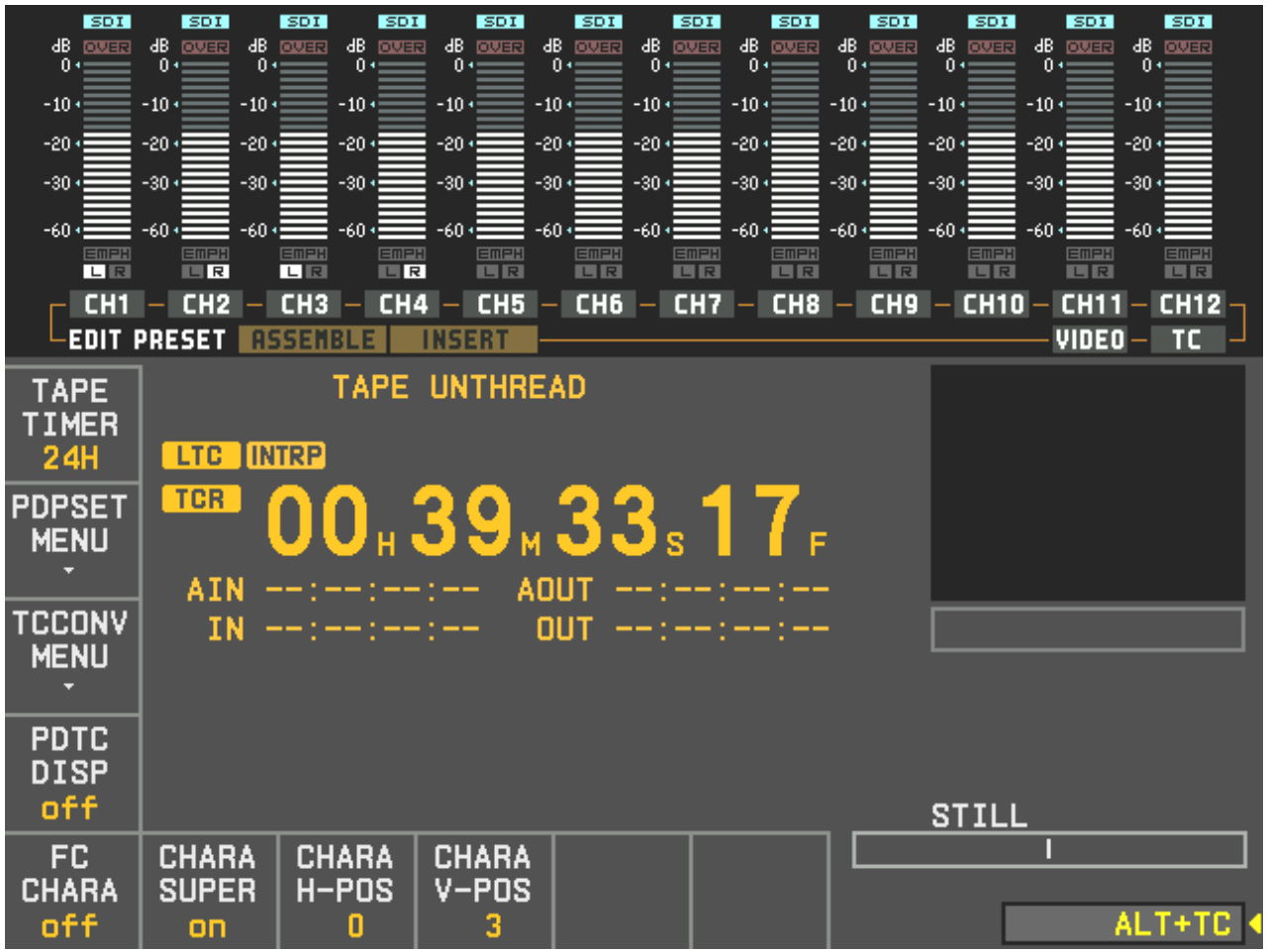
Using number pad enter the start timecode.

Press SET.

Press F3 (TIMER SET).

Press INPUT CHECK button to confirm correct setting. TCR will change to TCG

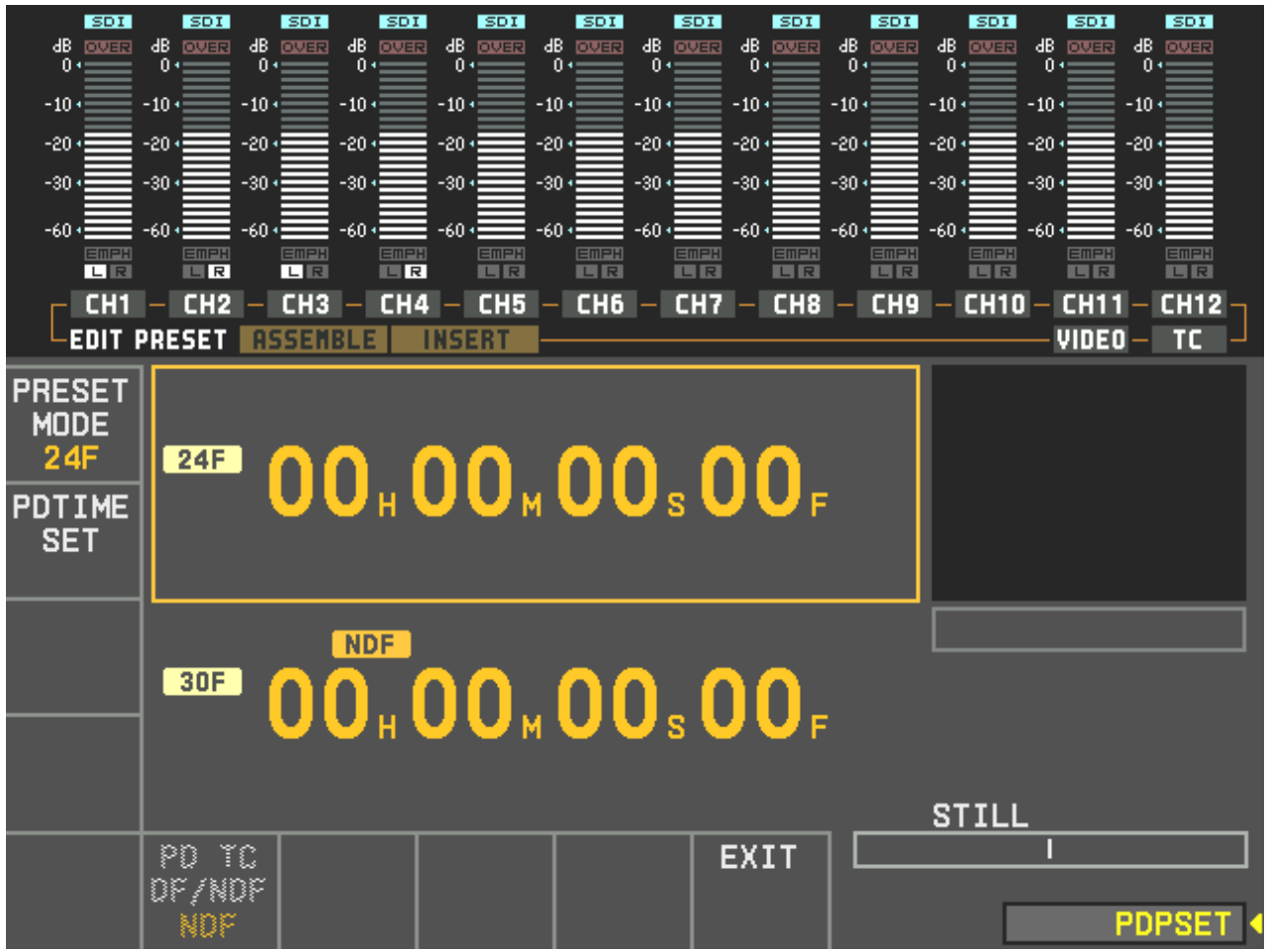
TC / ALT


SDI
dB
OVER
0
-10
-20
-30
-60
EMPH
L R
CH1 CH2 CH3 CH4 CH5 CH6 CH7 CH8 CH9 CH10 CH11 CH12
EDIT PRESET
ASSEMBLE
INSERT
VIDEO
TC
TAPE TIMER 24H
TAPE UNTHREAD
LTC
INTRP
TCR
00H 39M 33S 17F
AIN --:--:--:--
AOUT --:--:--:--
IN --:--:--:--
OUT --:--:--:--
PDPSET MENU
TCCONV MENU
PDTC DISP off
STILL
FC CHARA off
CHARA SUPER on
CHARA H-POS 0
CHARA V-POS 3
ALT+TC

PDPSET

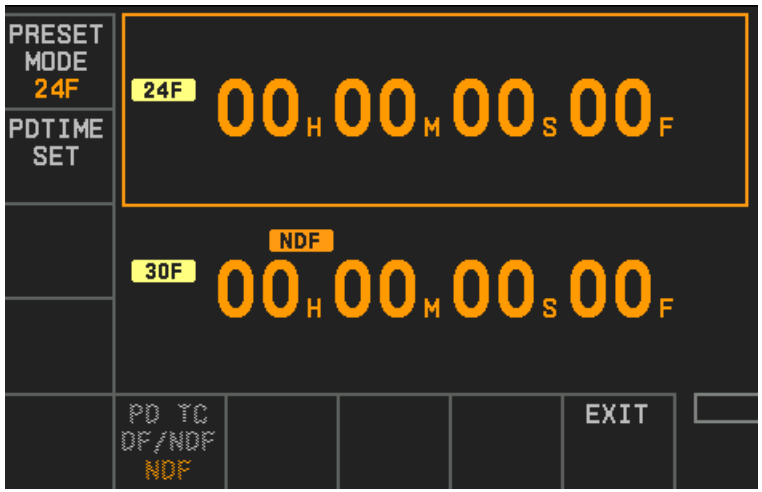
(Pulldown Preset)

This menu is used to set the relationship between 24F original timecode and 30F pulldown timecode



PDPSET

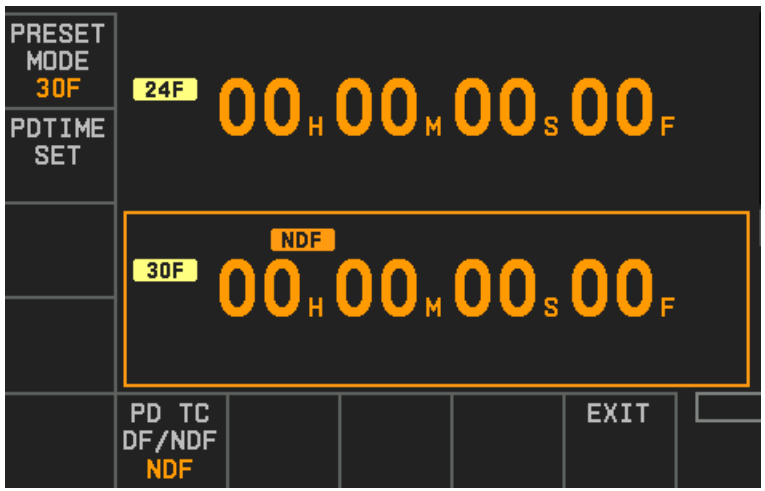
(Pulldown Preset)



Typical setting for down convert of ‘Dailies’ and for ‘Offline’ editing.

1080/23.98PsF to 525/59.94i

00:00:00:00 24F
00:00:00:00 30F NDF

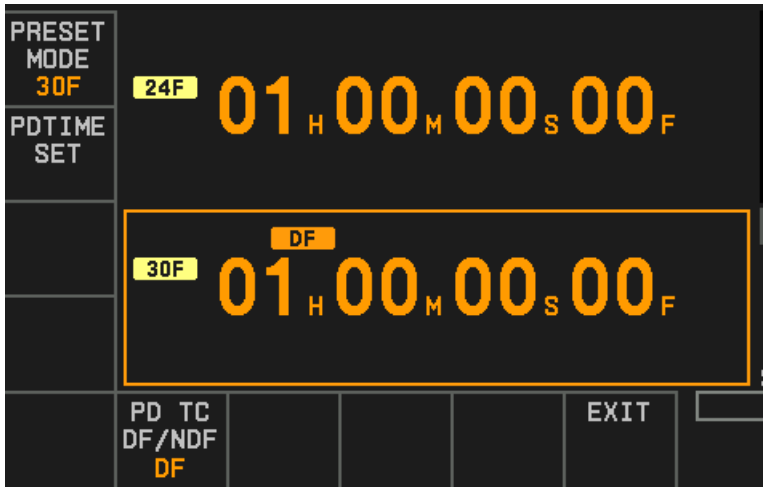


“A” frames will occur at:

Frames 00, 04, 08, 12, 16, 20 for 24F
Frames 00, 05, 10, 15, 20, 25 for 30F

PDPSET

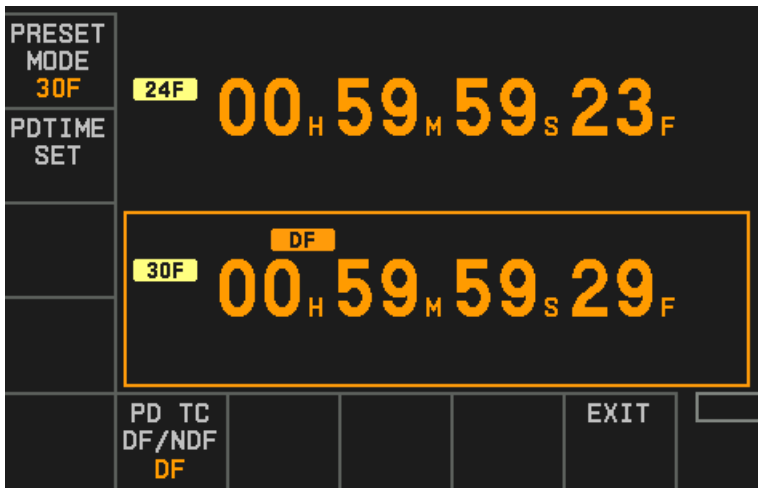
(Pulldown Preset)



Distribution master with 30F DF timecode.

Program starts at 01:00:00:00 for both 23.98PsF and 59.94i.

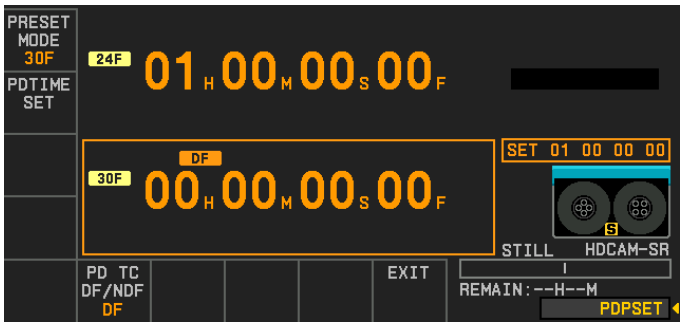
First frame of 59.94i is an “A” frame.

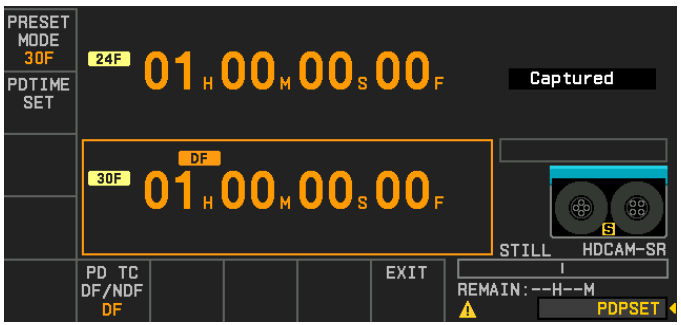


Some clients request program to start with a “B” frame.

Modifying the “A” frame relationship between 24F and 30F allows us to shift the “A” frame.

“B” frame will now occur at 01:00:00:00





HOW TO USE PULLDOWN PRESET MENU

Press F1 (PRESET MODE) to 24F.

Enter 24F START TIMECODE using the number pad.

Example: 01:00:00:00

Press SET

Press F2 (PDTIME SET)

Press F1 (PRESET MODE) to 30F.

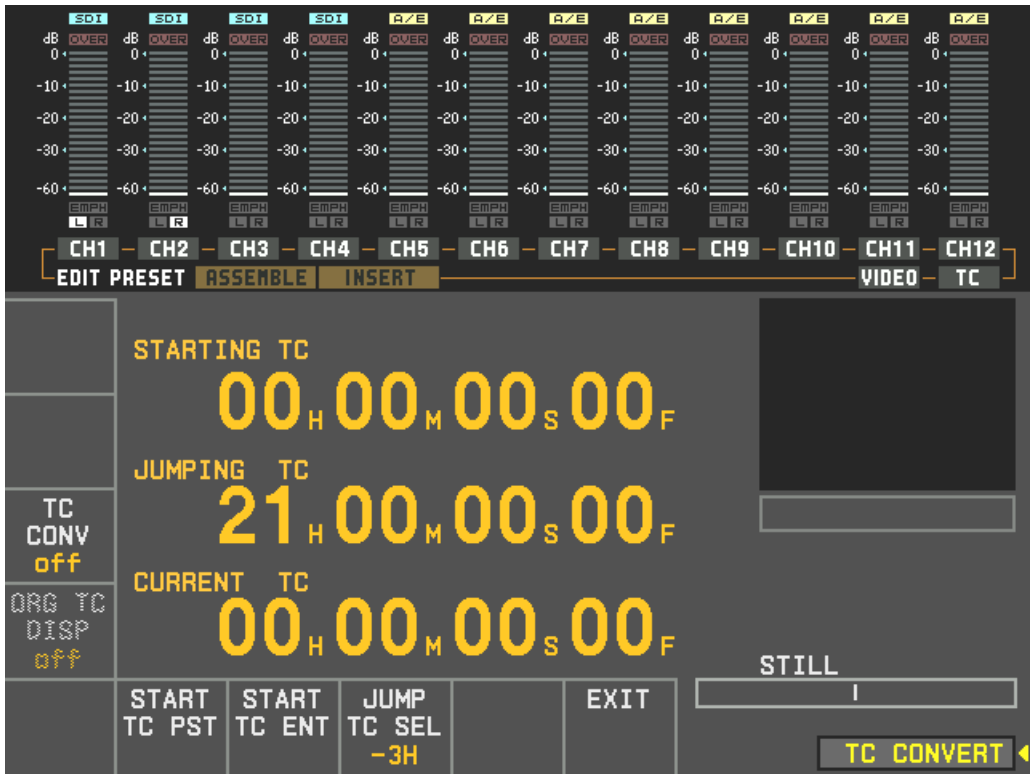
Enter 30F START TIMECODE using the number pad.

Example: 01:00:00:00
Press SET

Press F2 (PDTIME SET)

Press F6 (PD TC DF/NDF) to select:
DF for ‘distribution/transmission’
NDF for ‘off-line/dailies’

TC CONVERT



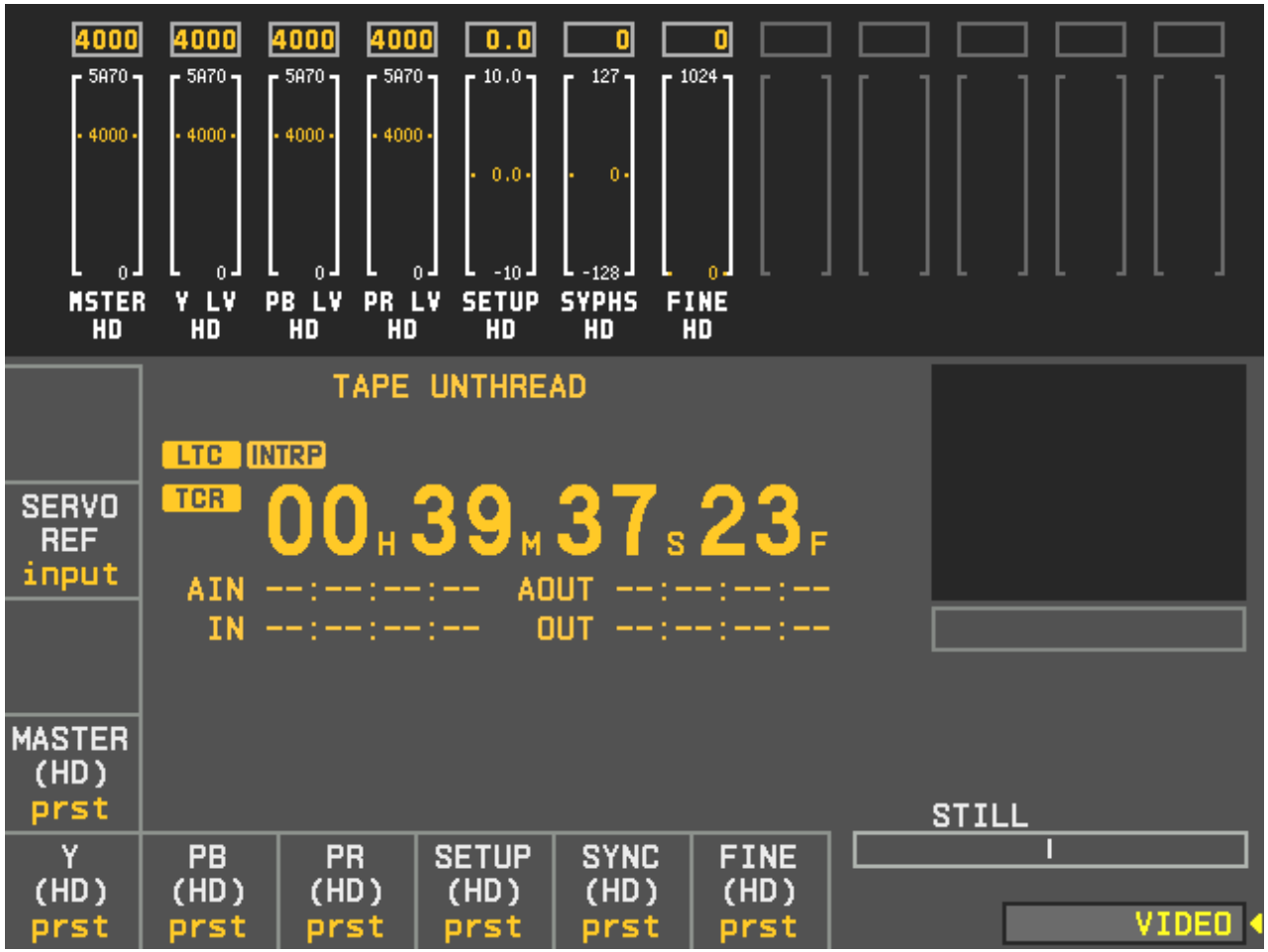
The TC CONVERT menu is primarily used to convert 24F timecode to 25F timecode.

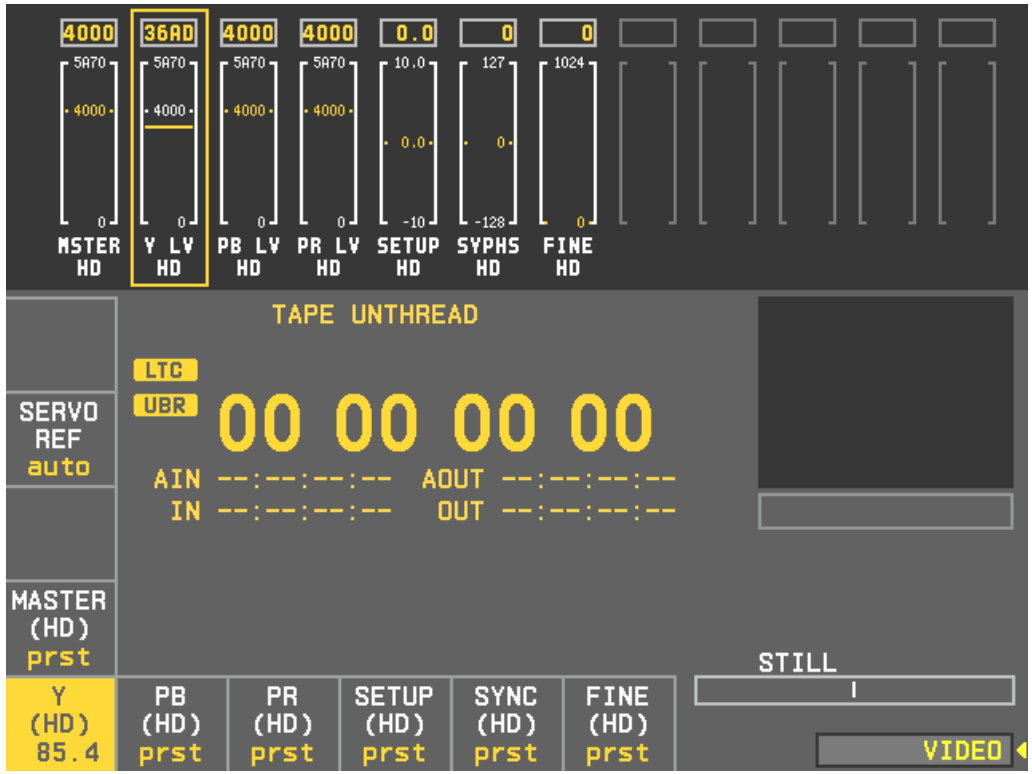
This is useful when replaying a 23.98PsF tape at 25PsF to produce masters for European distribution.

It can also be used to convert 25F or 30F timecode to 24F timecode for off-speed slo-mo.

NOTE: The converted timecode is ONLY available as embedded VITC in the video outputs. The XLR LTC output will remain the native format of the playback tape.

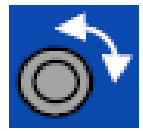
VIDEO


4000
4000
4000
4000
0.0
0
0
5A70
4000
0
10.0
0.0
-10
127
-128
1024
MSTER HD
Y LV HD
PB LV HD
PR LV HD
SETUP HD
SYPHS HD
FINE HD
TAPE UNTHREAD
LTC
INTRP
TCR
00H 39M 37S 23F
AIN --:--:--:--
AOUT --:--:--:--
IN --:--:--:--
OUT --:--:--:--
SERVO REF input
MASTER (HD) prst
STILL
Y (HD) prst
PB (HD) prst
PR (HD) prst
SETUP (HD) prst
SYNC (HD) prst
FINE (HD) prst
VIDEO



Press the function button associated with the parameter to be adjusted.

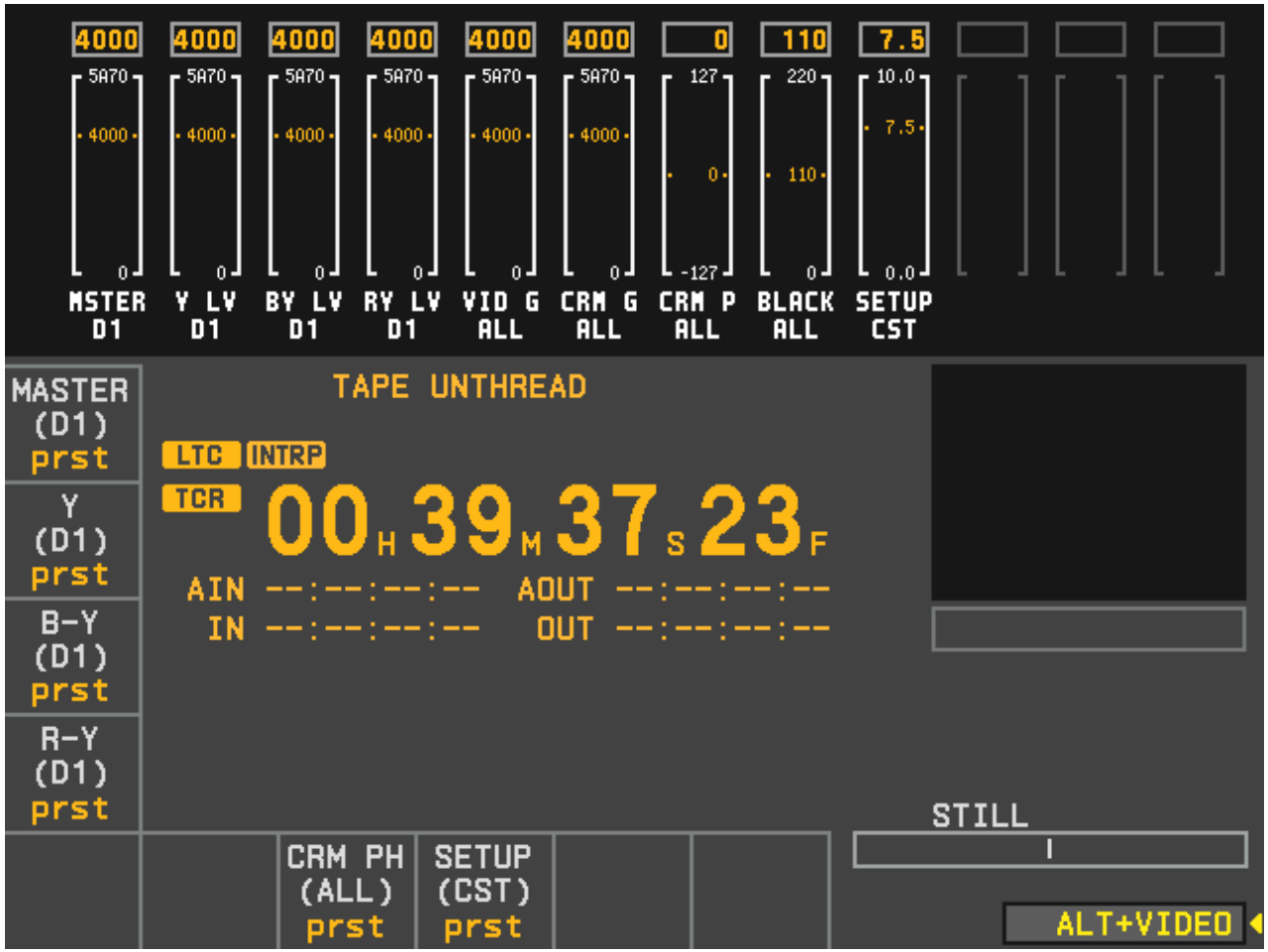
Rotate the Multi Control



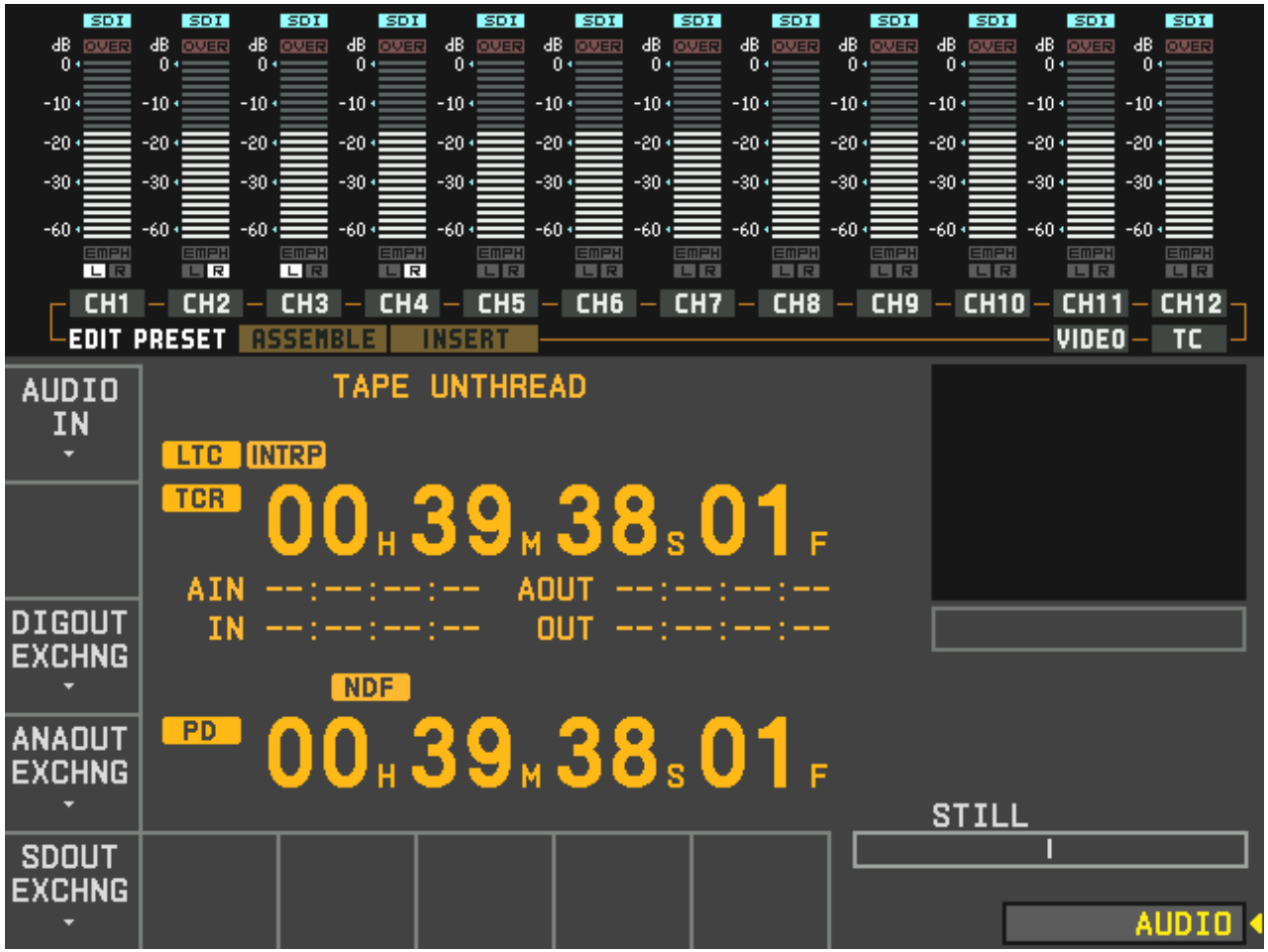
Press the function button again to lock the adjustment.

Or press the Multi Control to reset back to PRESET value.

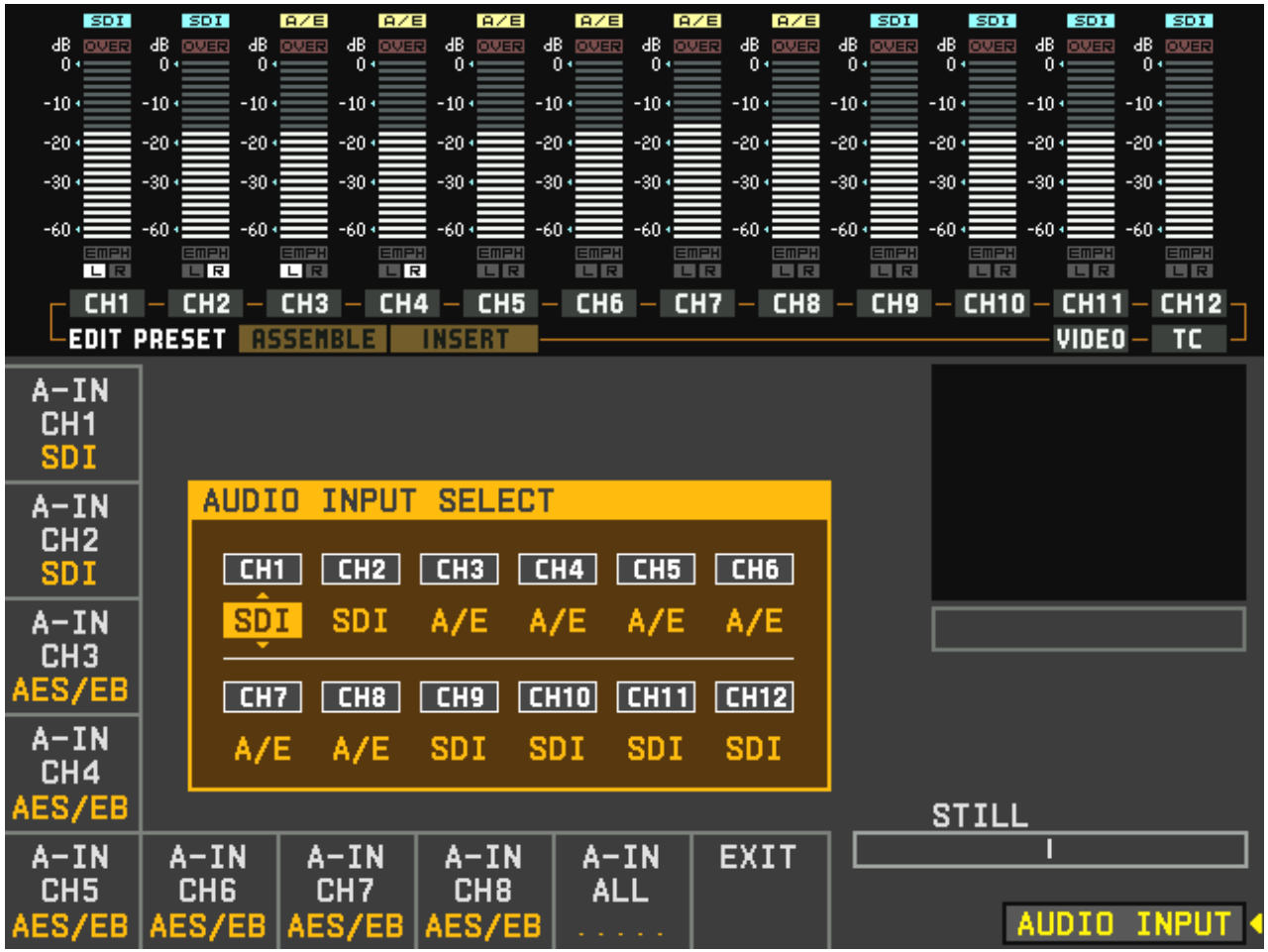
VIDEO / ALT
Downconverter adjustments



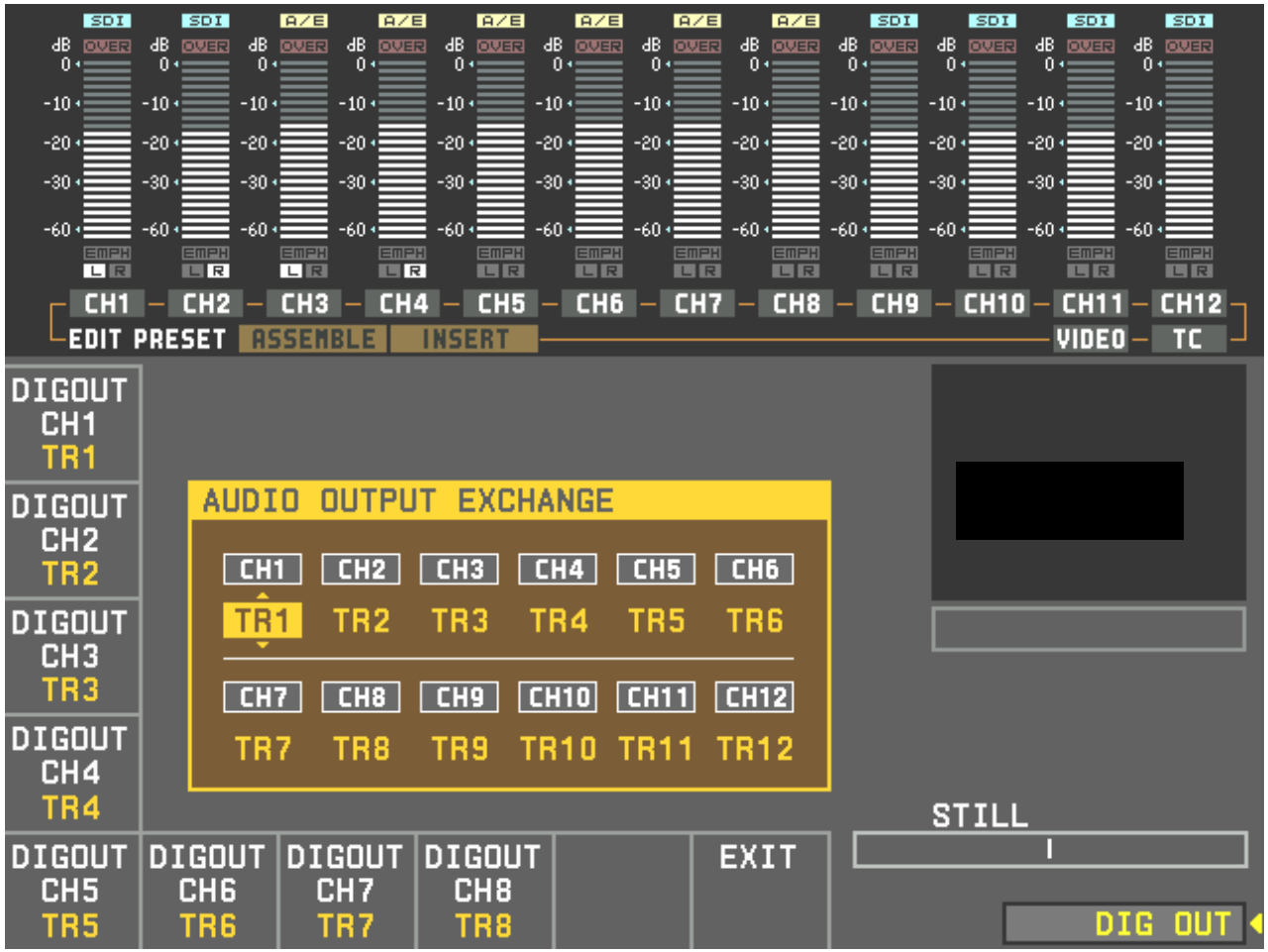
AUDIO


SDI
dB
OVER
0
-10
-20
-30
-60
EMPH
L R
CH1 CH2 CH3 CH4 CH5 CH6 CH7 CH8 CH9 CH10 CH11 CH12
EDIT PRESET
ASSEMBLE
INSERT
VIDEO
TC
AUDIO IN
TAPE UNTHREAD
LTC
INTRP
TCR
00H 39M 38S 01F
AIN --:--:--:--
AOUT --:--:--:--
IN --:--:--:--
OUT --:--:--:--
NDF
PD
00H 39M 38S 01F
DIGOUT EXCHNG
ANAOUT EXCHNG
SDOUT EXCHNG
STILL
AUDIO

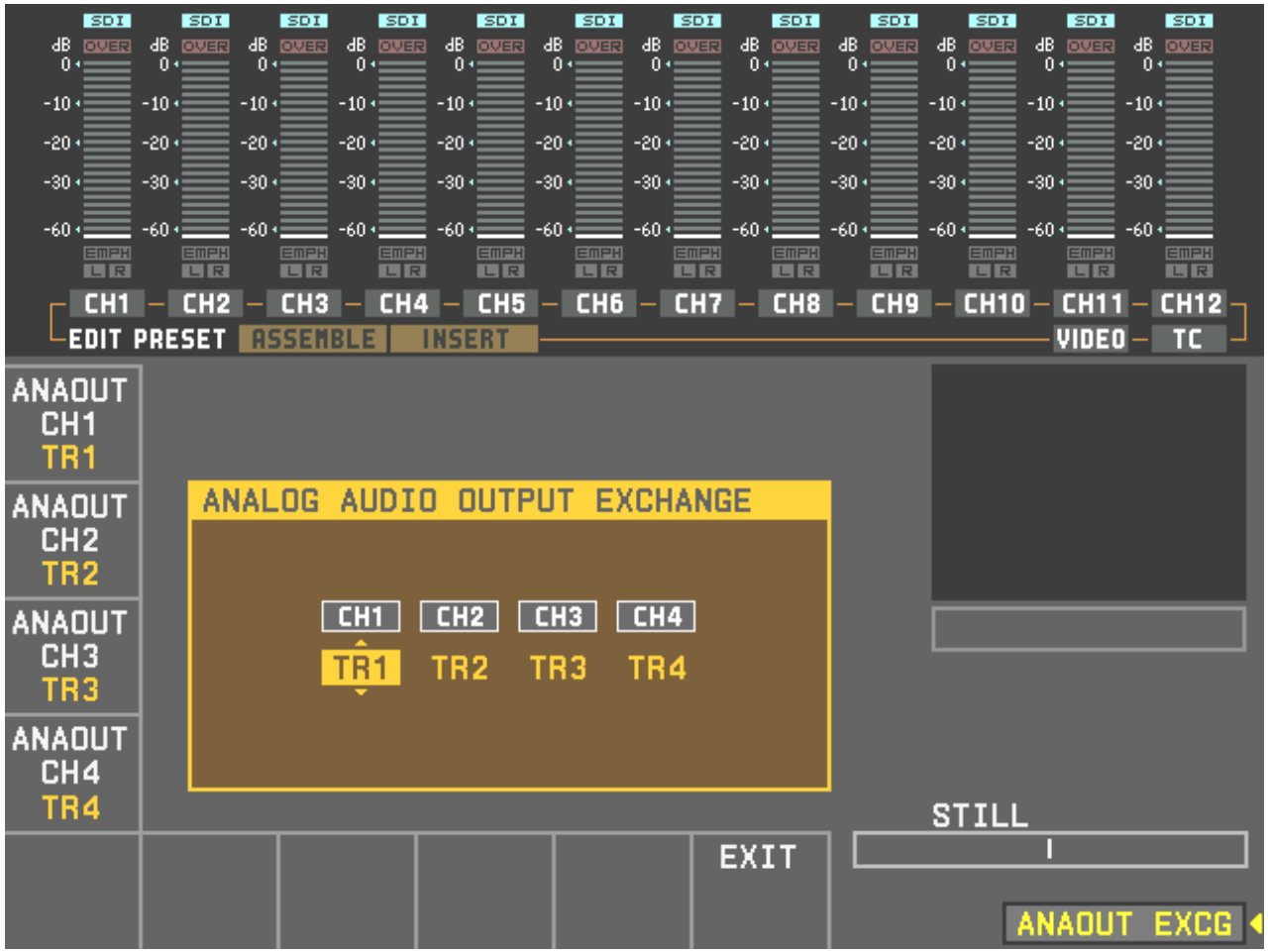
AUDIO: AUDIO IN



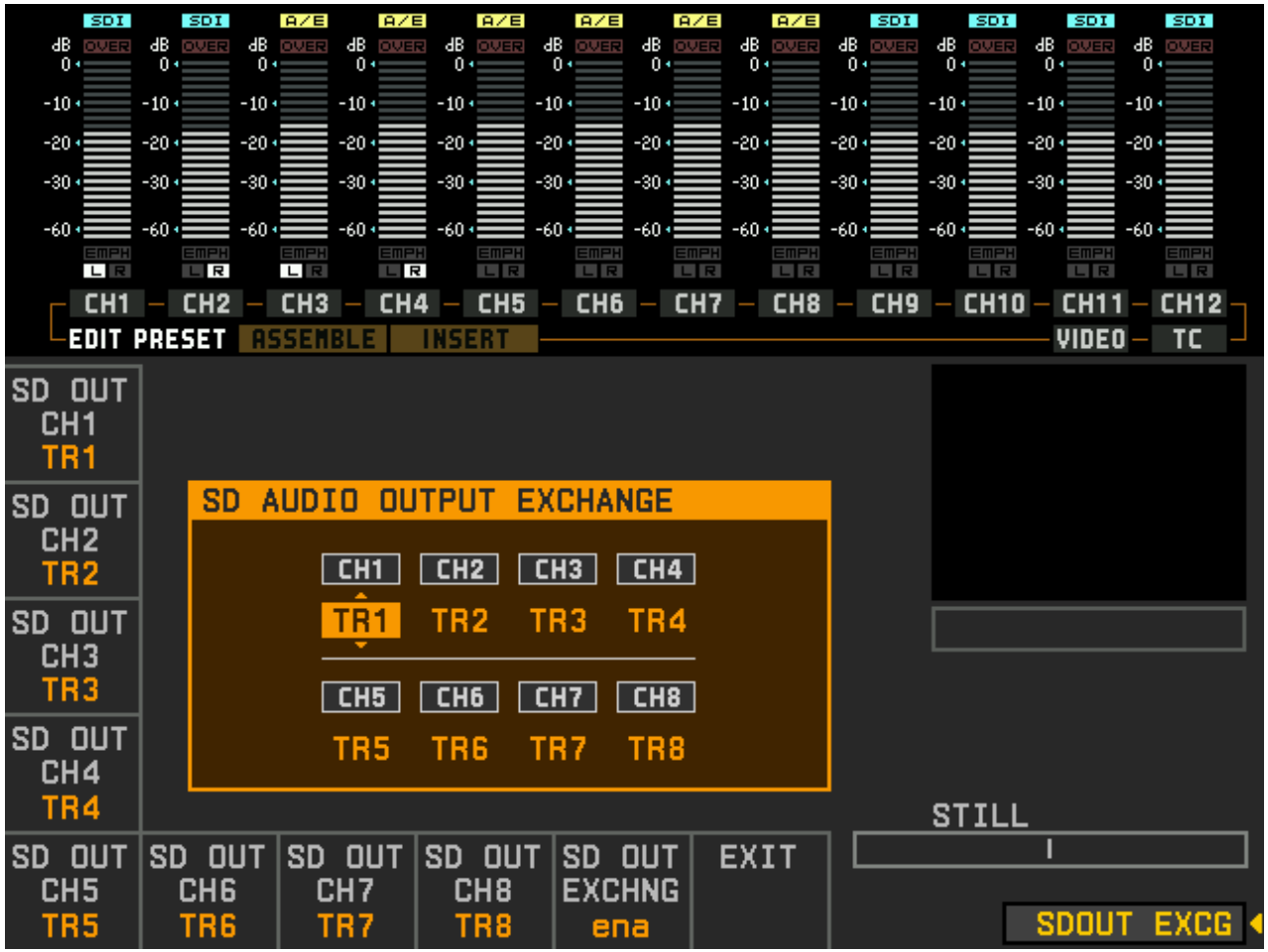
AUDIO: DIGITAL OUT EXCHANGE



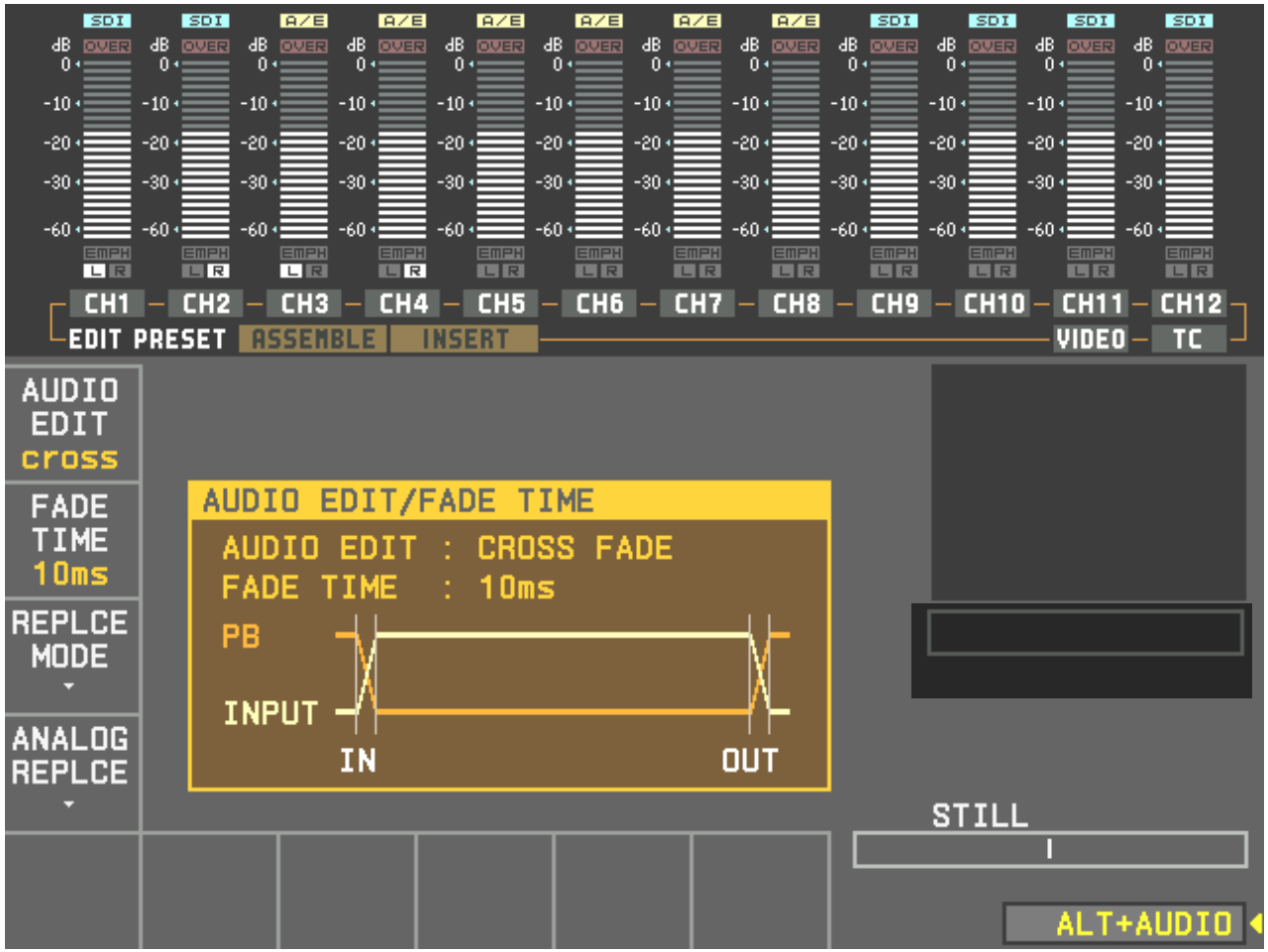
AUDIO: ANALOG OUT EXCHANGE



AUDIO: SD DIGITAL OUT EXCHANGE

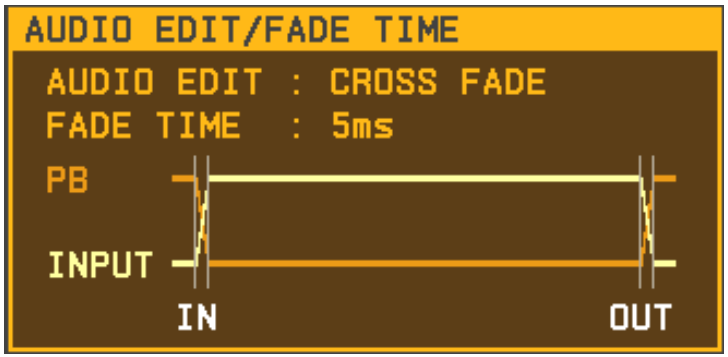


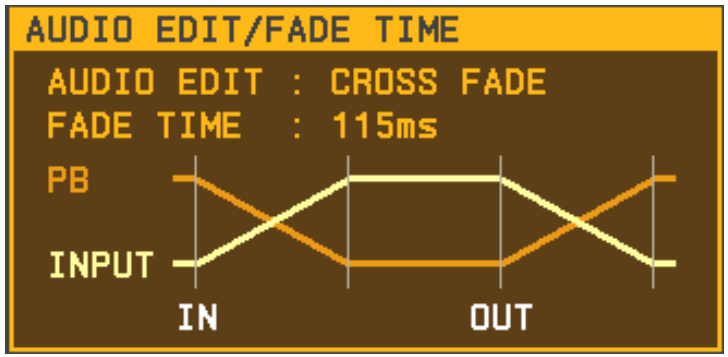
AUDIO / ALT


SDI
A/E
OVER
dB
0
-10
-20
-30
-60
EMPH
L R
CH1 CH2 CH3 CH4 CH5 CH6 CH7 CH8 CH9 CH10 CH11 CH12
EDIT PRESET
ASSEMBLE
INSERT
VIDEO
TC
AUDIO EDIT
cross
FADE TIME
10ms
REPLCE MODE
ANALOG REPLCE
AUDIO EDIT/FADE TIME
AUDIO EDIT : CROSS FADE
FADE TIME : 10ms
PB
INPUT
IN
OUT
STILL
ALT+AUDIO

AUDIO / ALT : AUDIO EDIT CROSS FADE

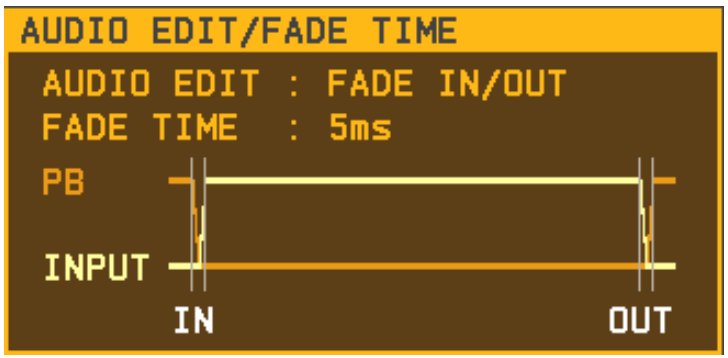
Cross fade time is user selectable from 5msec to 115msec. Default cross fade time is 10msec

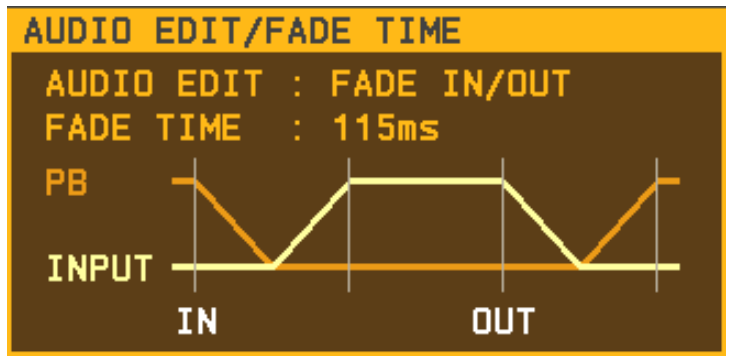




AUDIO / ALT : AUDIO EDIT FADE IN/OUT

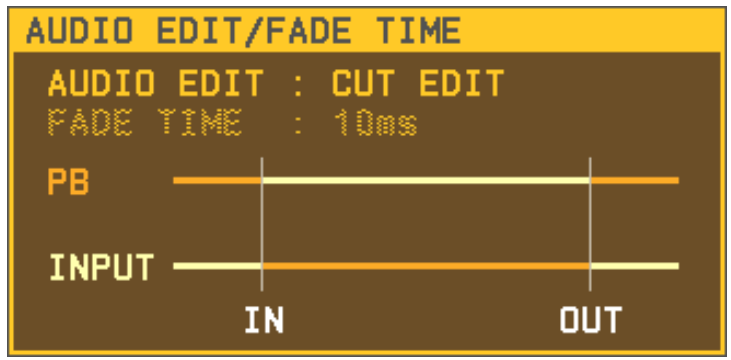
Fade In/Out time is user selectable from 5msec to 115msec.
Default cross fade time is 10msec



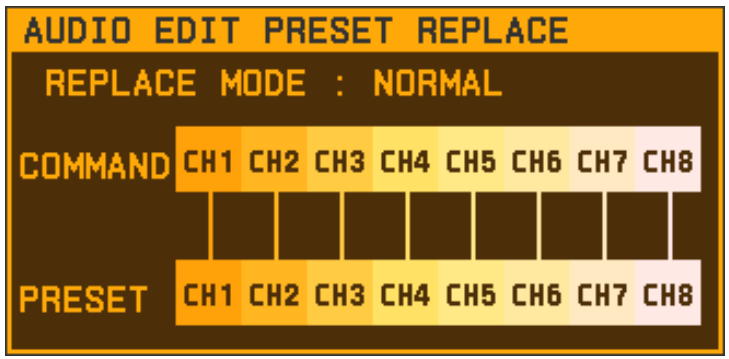


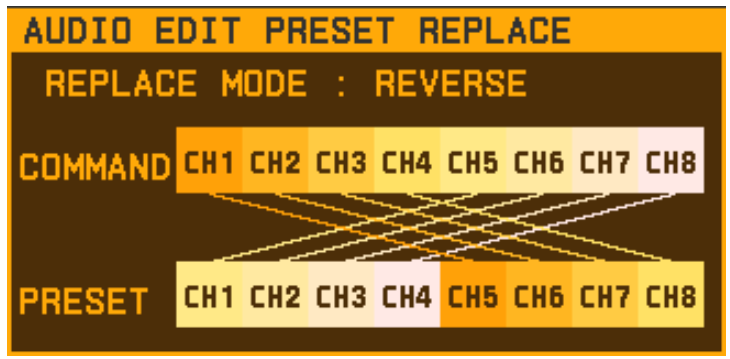
AUDIO / ALT : AUDIO EDIT CUT

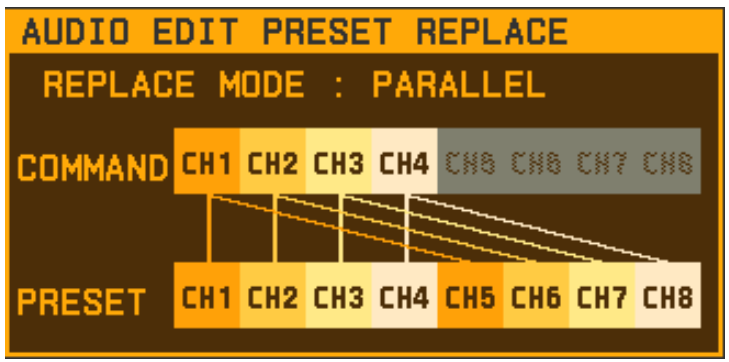
Use Cut Edit mode when editing Dolby E streams.
Dolby E data is frame based.

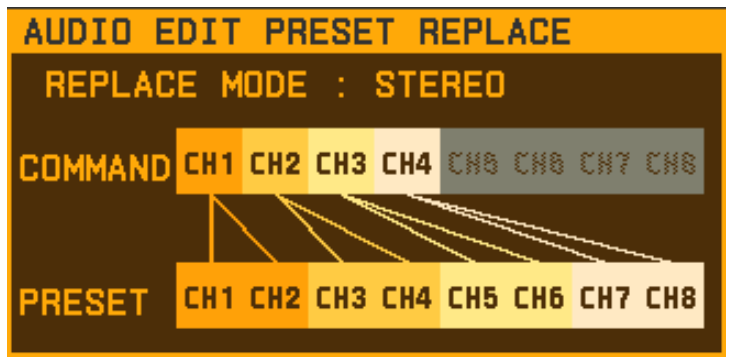


AUDIO / ALT:
REPLACE MODE

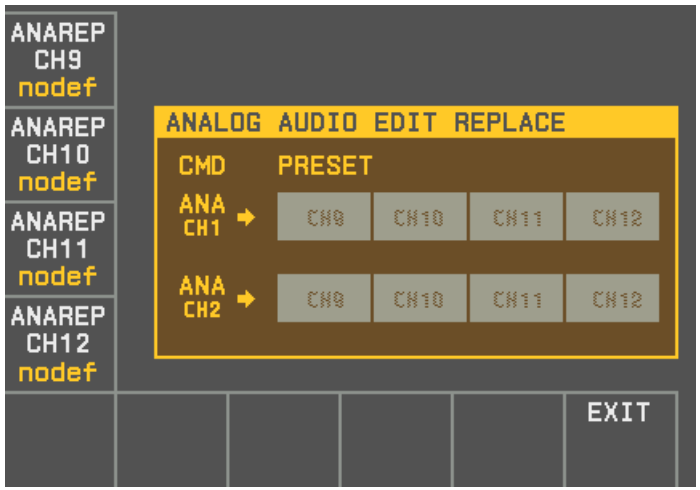

AUDIO EDIT PRESET REPLACE
REPLACE MODE : NORMAL
COMMAND CH1 CH2 CH3 CH4 CH5 CH6 CH7 CH8
PRESET CH1 CH2 CH3 CH4 CH5 CH6 CH7 CH8

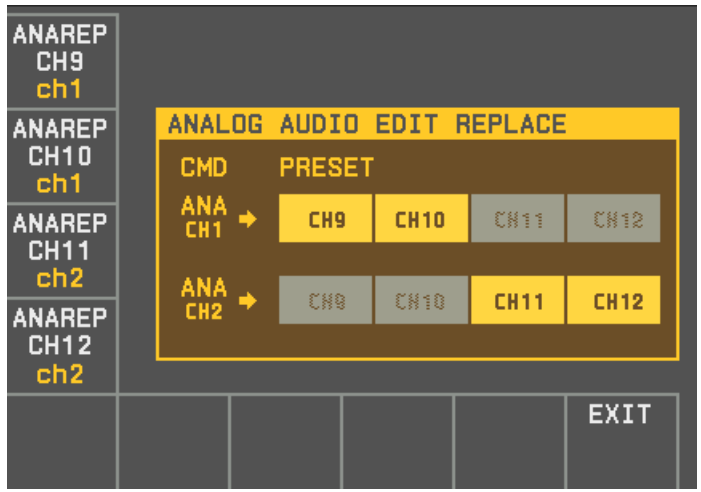

AUDIO EDIT PRESET REPLACE
REPLACE MODE : REVERSE
COMMAND CH1 CH2 CH3 CH4 CH5 CH6 CH7 CH8
PRESET CH1 CH2 CH3 CH4 CH5 CH6 CH7 CH8



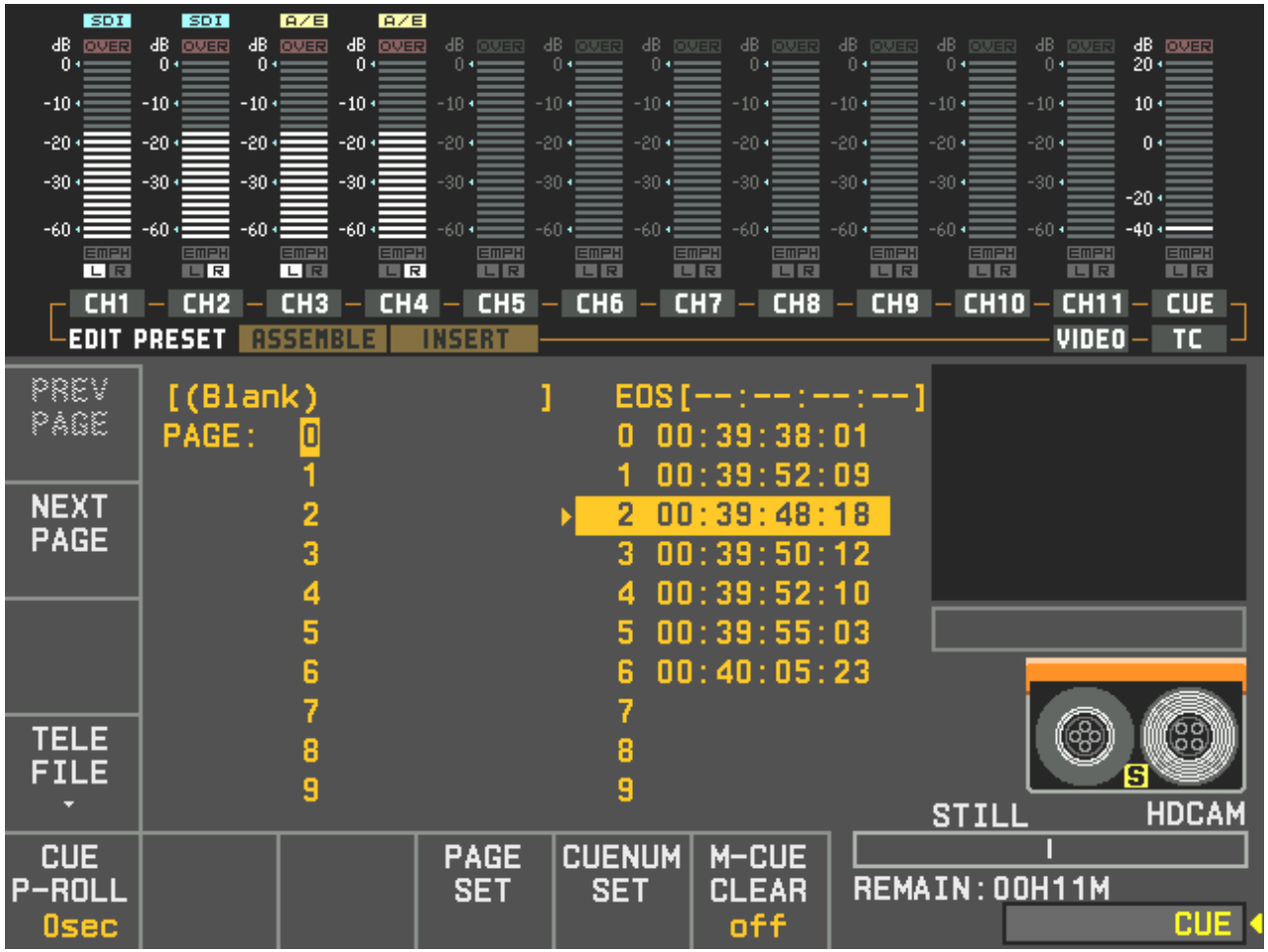


AUDIO / ALT:
ANALOG AUDIO EDIT REPLACE

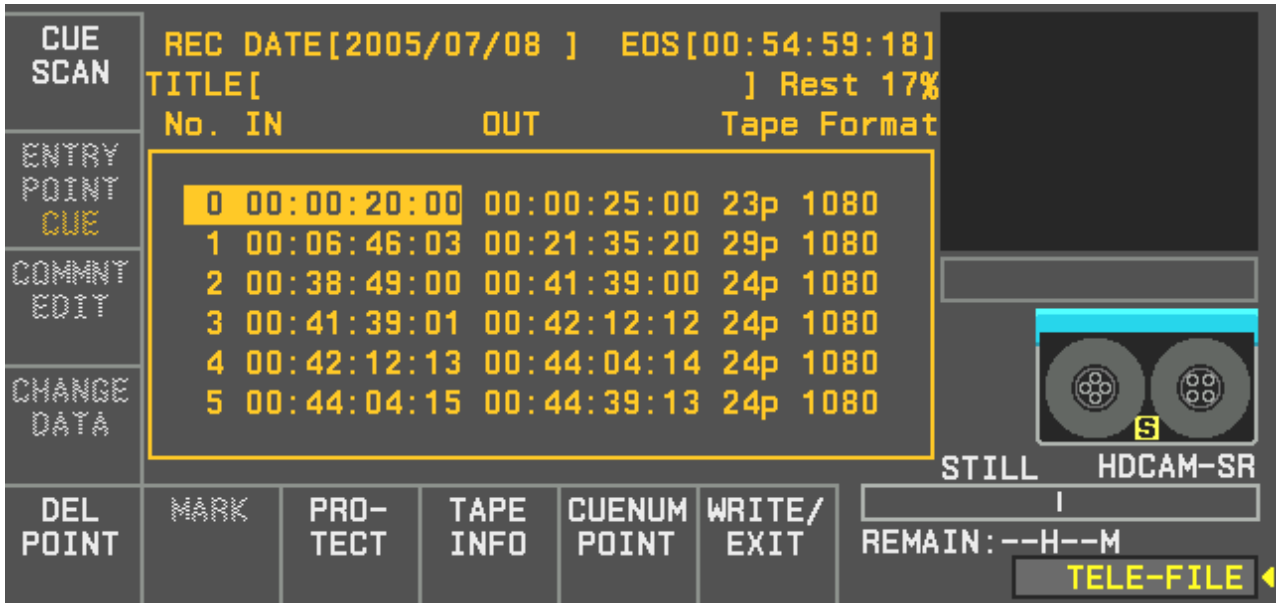




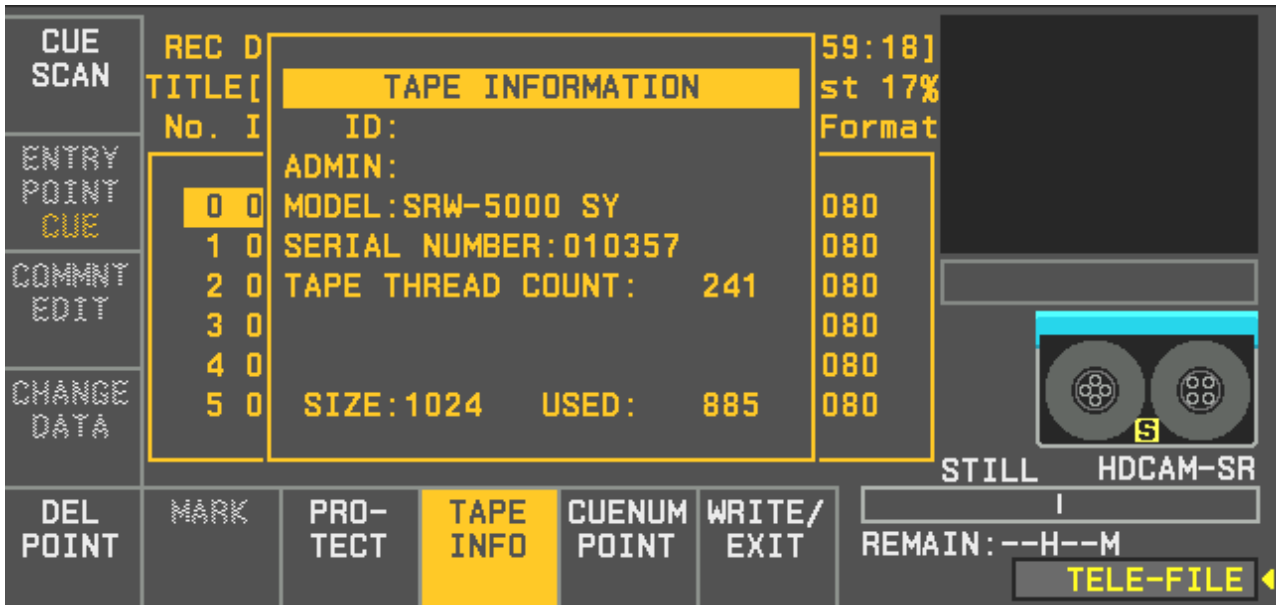
CUE


SDI
SDI
A/E
A/E
dB
OVER
0
-10
-20
-30
-60
20
10
-40
EMPH
L R
CH1 CH2 CH3 CH4 CH5 CH6 CH7 CH8 CH9 CH10 CH11 CUE
EDIT PRESET ASSEMBLE INSERT
VIDEO TC
PREV PAGE
NEXT PAGE
TELE FILE
[(Blank)]
PAGE: 0
1
2
3
4
5
6
7
8
9
EOS[--:--:--:--]
0 00:39:38:01
1 00:39:52:09
2 00:39:48:18
3 00:39:50:12
4 00:39:52:10
5 00:39:55:03
6 00:40:05:23
7
8
9
S
STILL
HDCAM
CUE P-ROLL 0sec
PAGE SET
CUENUM SET
M-CUE CLEAR off
REMAIN:00H11M
CUE

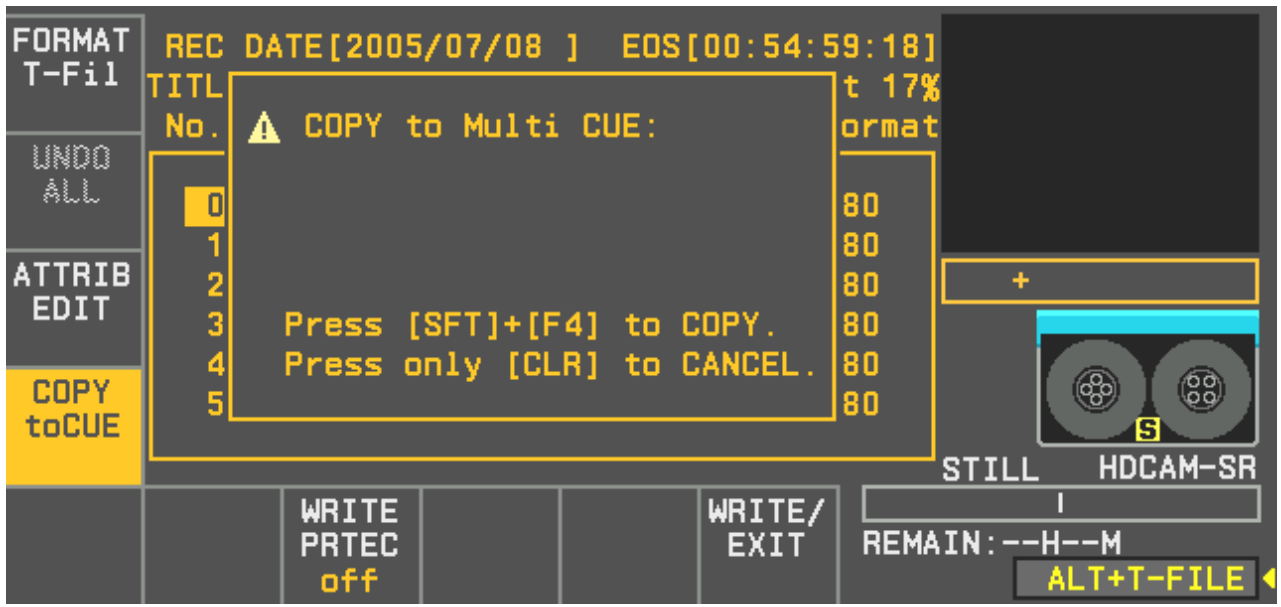
CUE / TELEFILE



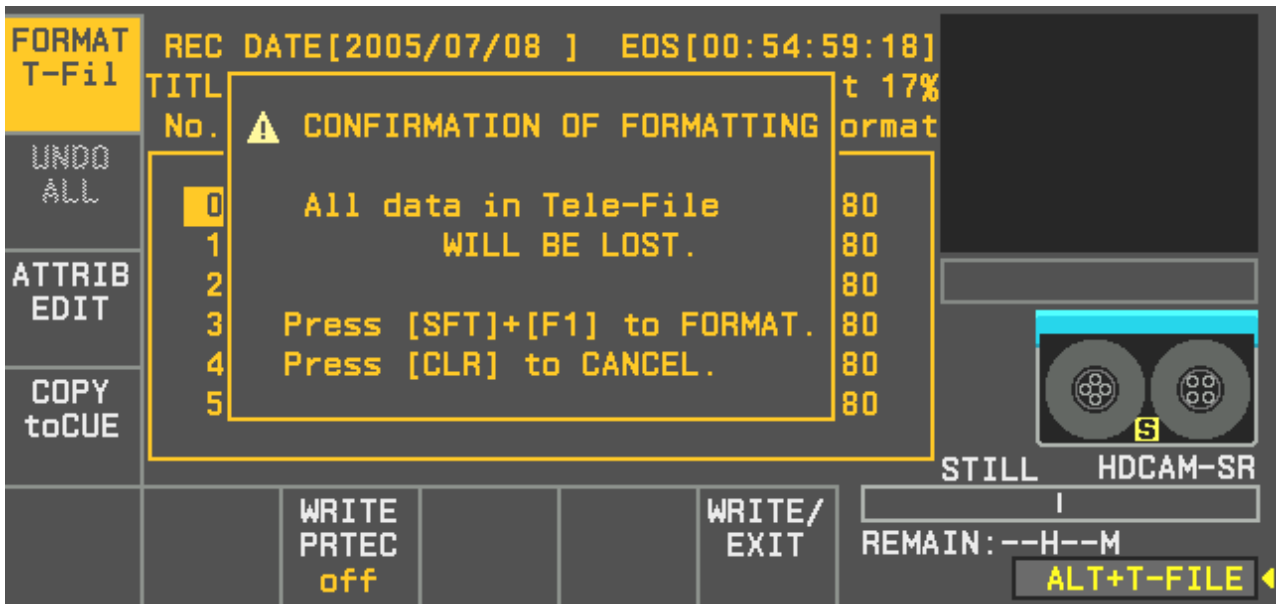
CUE / TELEFILE: TAPE INFO



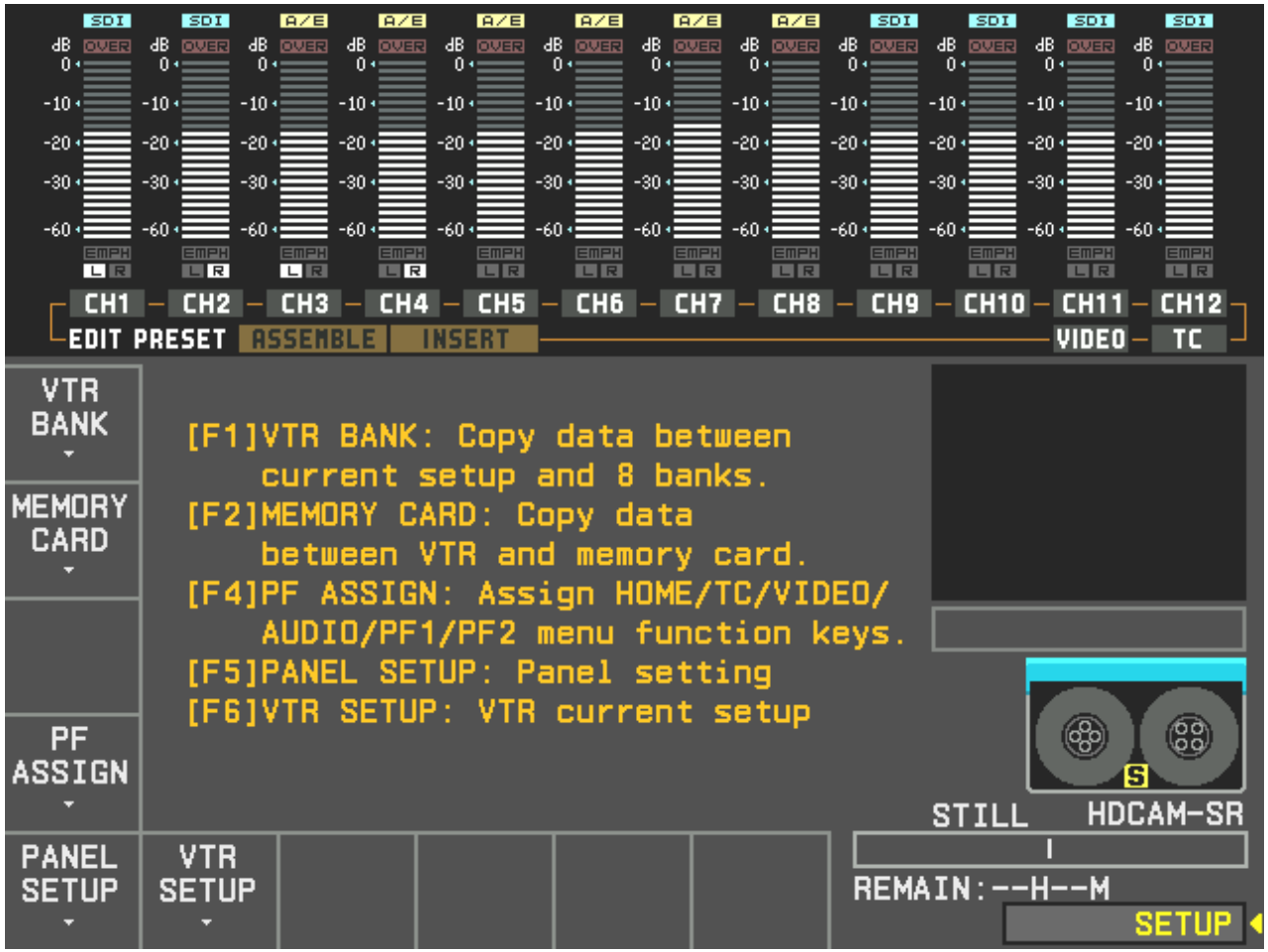
CUE / TELEFILE / ALT:
COPY TO CUE



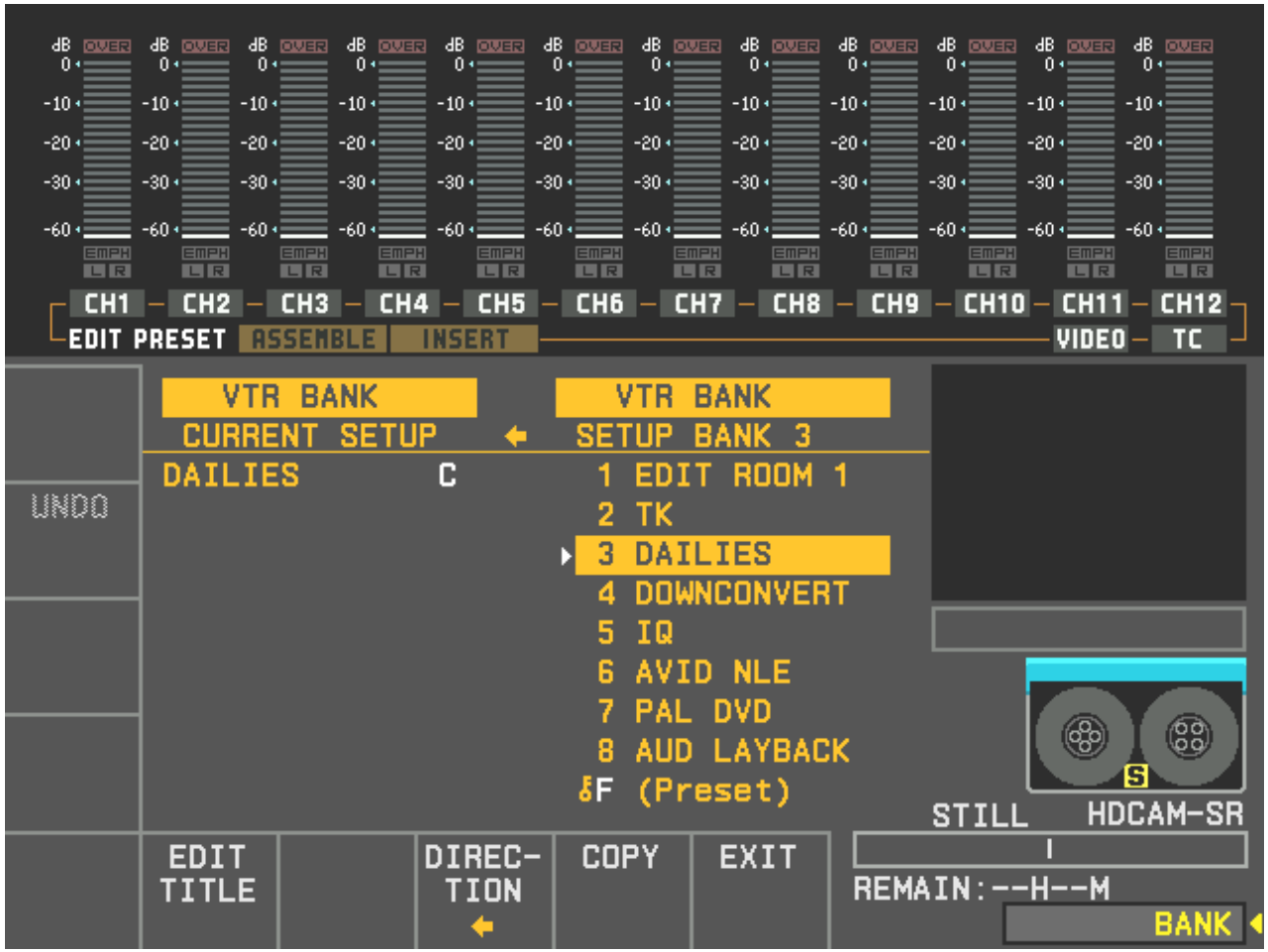
CUE / TELEFILE / ALT: FORMAT T-FILE



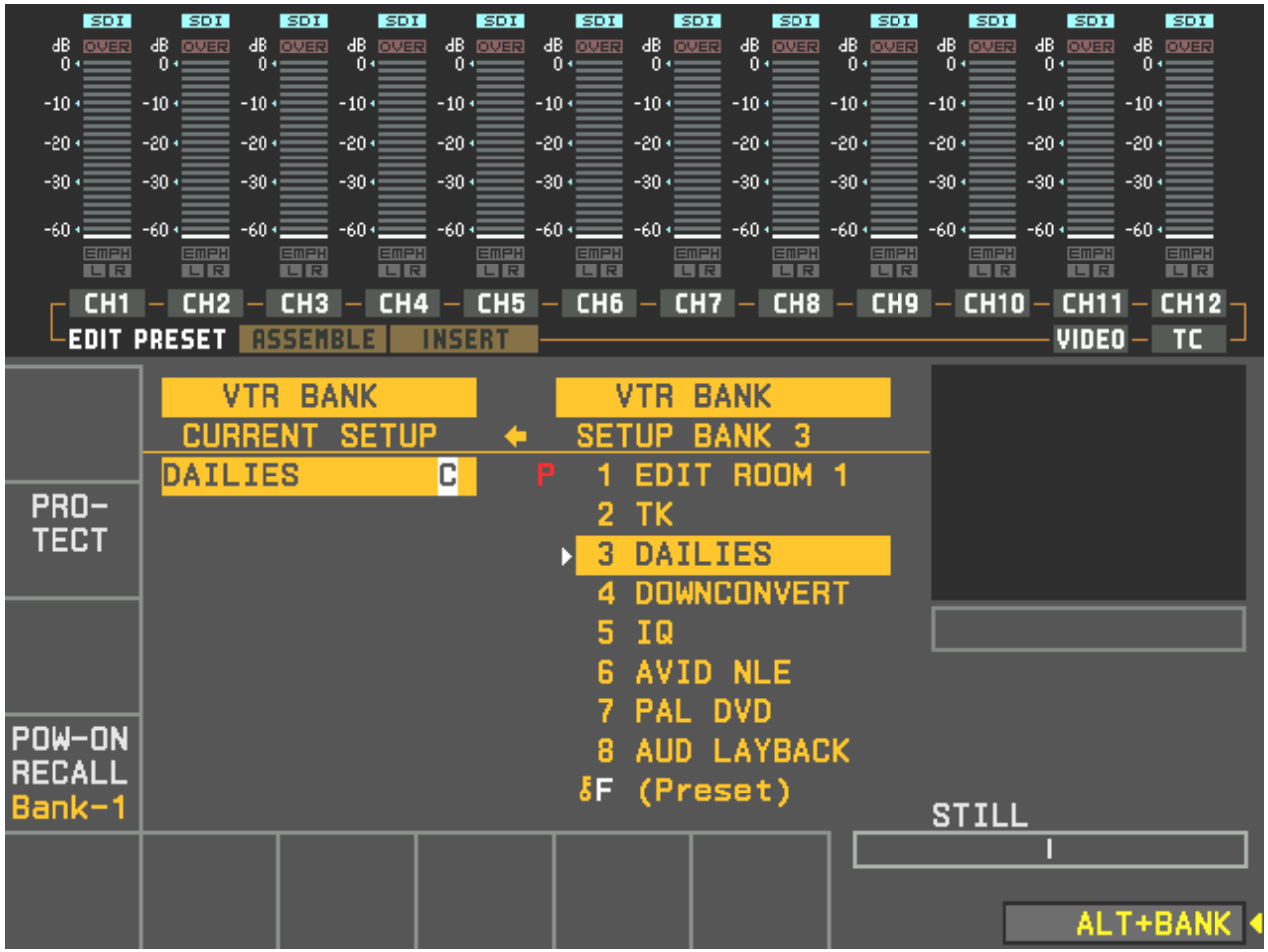
SETUP


SDI
A/E
dB
OVER
0
-10
-20
-30
-60
EMPH
L R
CH1 CH2 CH3 CH4 CH5 CH6 CH7 CH8 CH9 CH10 CH11 CH12
EDIT PRESET
ASSEMBLE
INSERT
VIDEO
TC
VTR BANK
MEMORY CARD
PF ASSIGN
PANEL SETUP
VTR SETUP
[F1]VTR BANK: Copy data between current setup and 8 banks.
[F2]MEMORY CARD: Copy data between VTR and memory card.
[F4]PF ASSIGN: Assign HOME/TC/VIDEO/ AUDIO/PF1/PF2 menu function keys.
[F5]PANEL SETUP: Panel setting
[F6]VTR SETUP: VTR current setup
S
STILL
HDCAM-SR
REMAIN:--H--M
SETUP

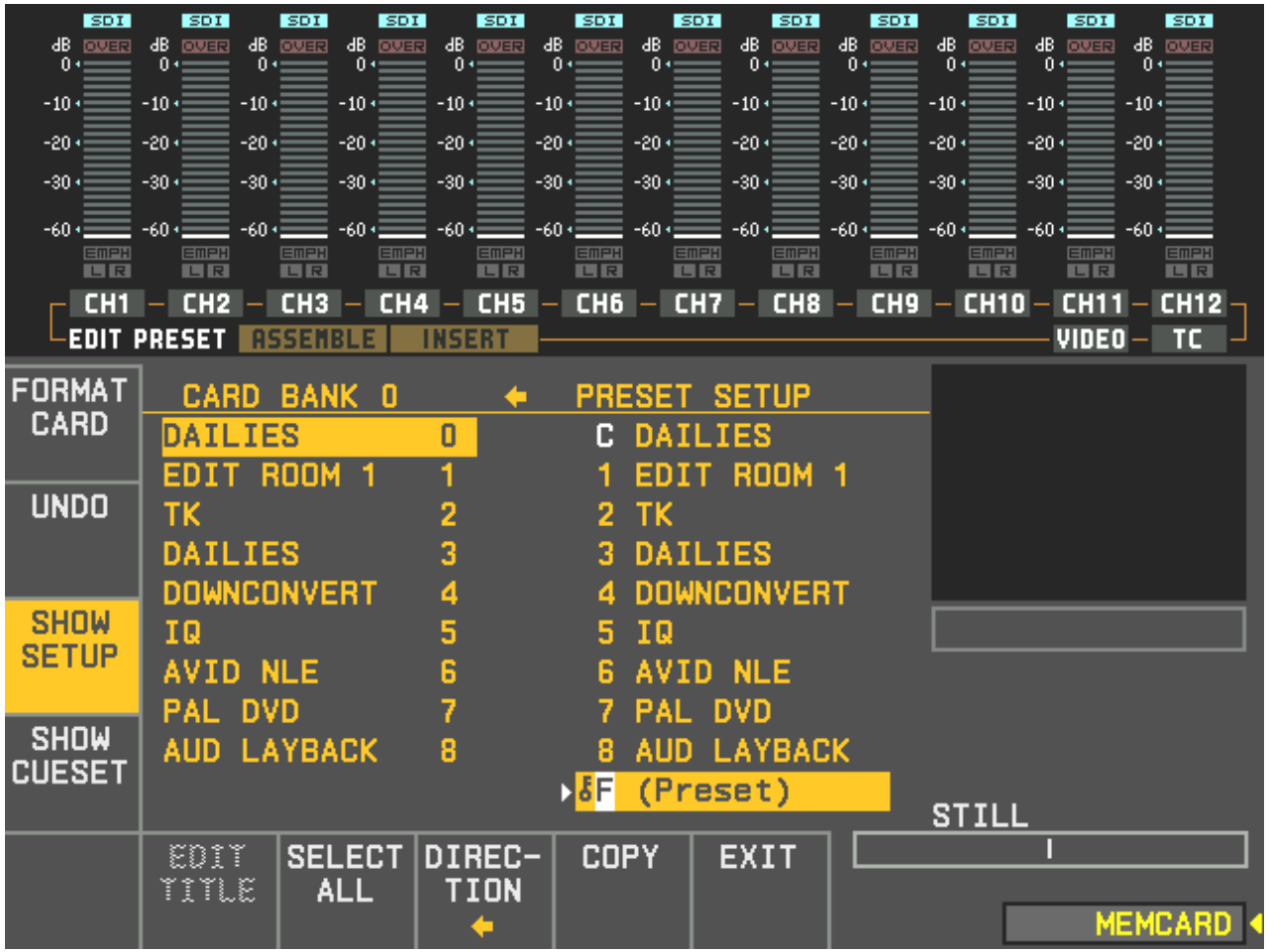
SETUP / VTR BANK



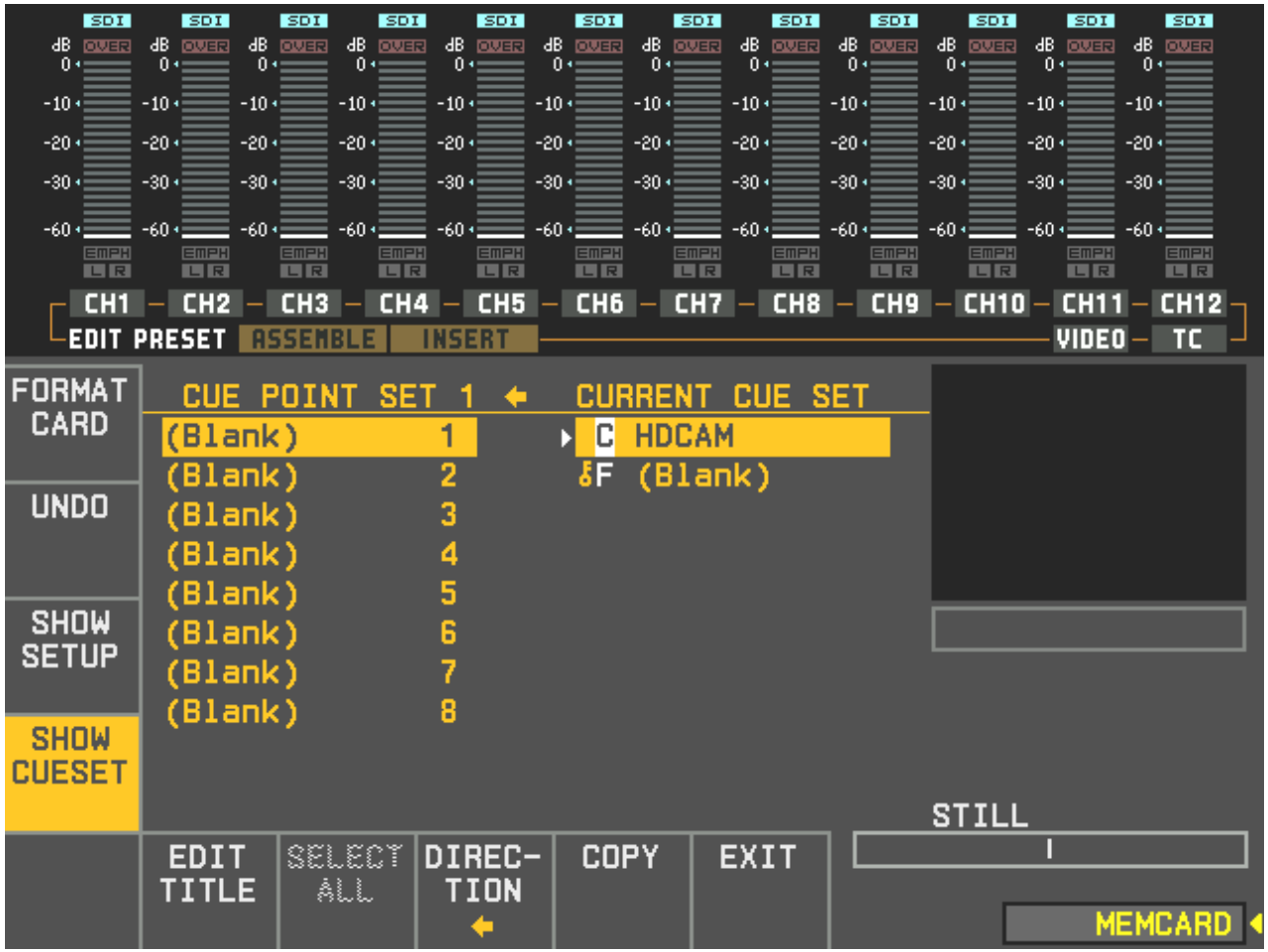
SETUP / VTR BANK / ALT



SETUP / MEM BANK / SETUP

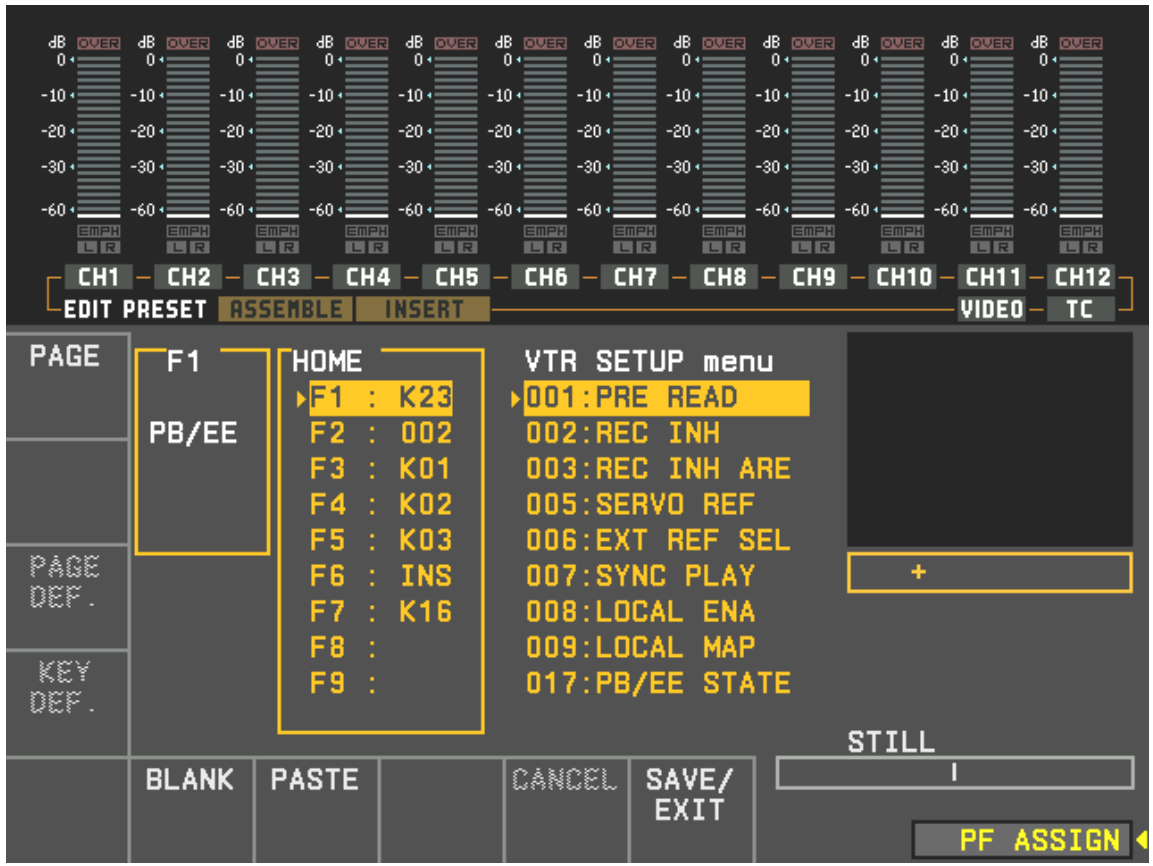


SETUP / MEM BANK / CUESET



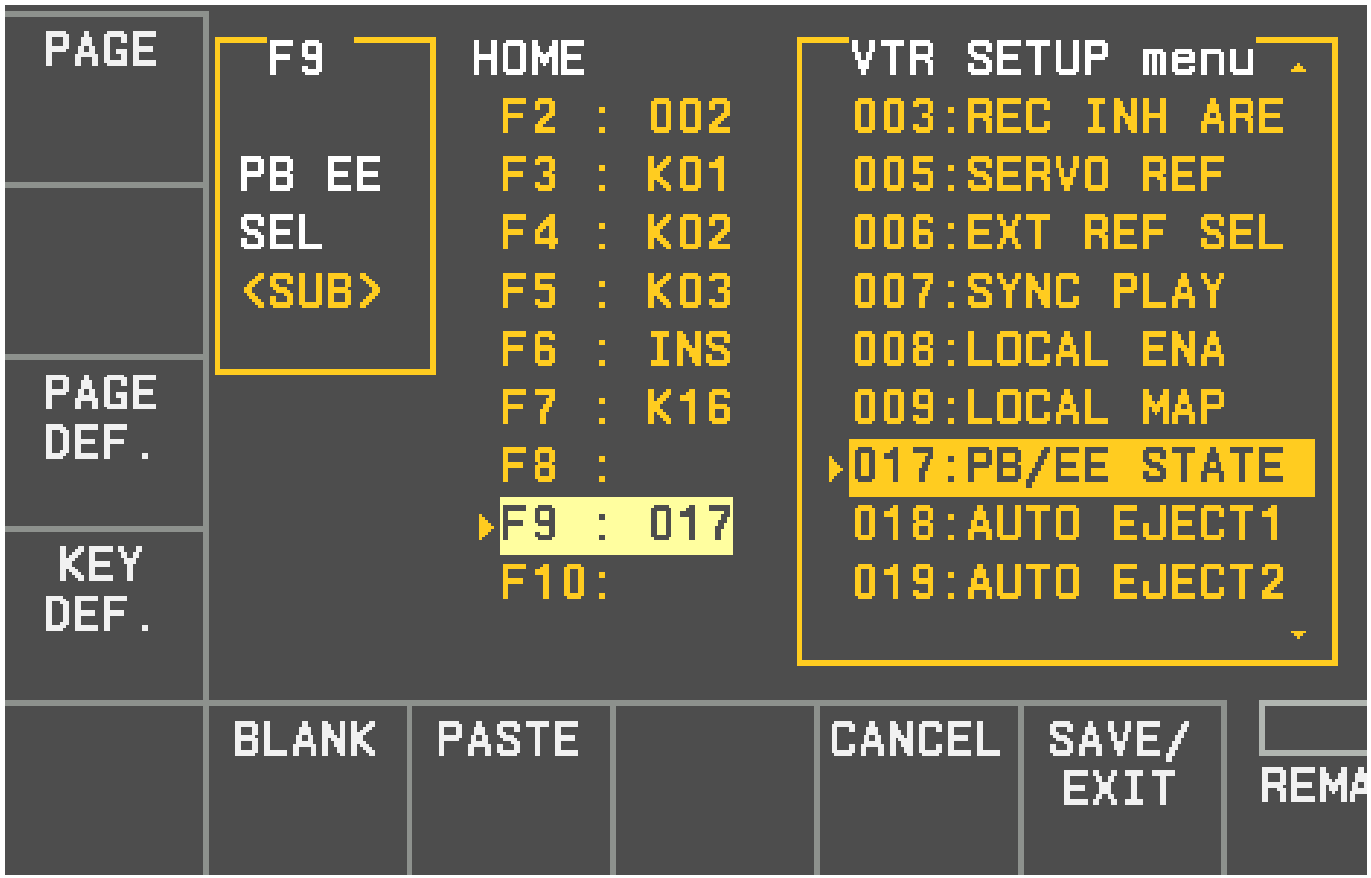
PF ASSIGN

In addition to user Pages PF1 and PF2, all menu pages can be customized.

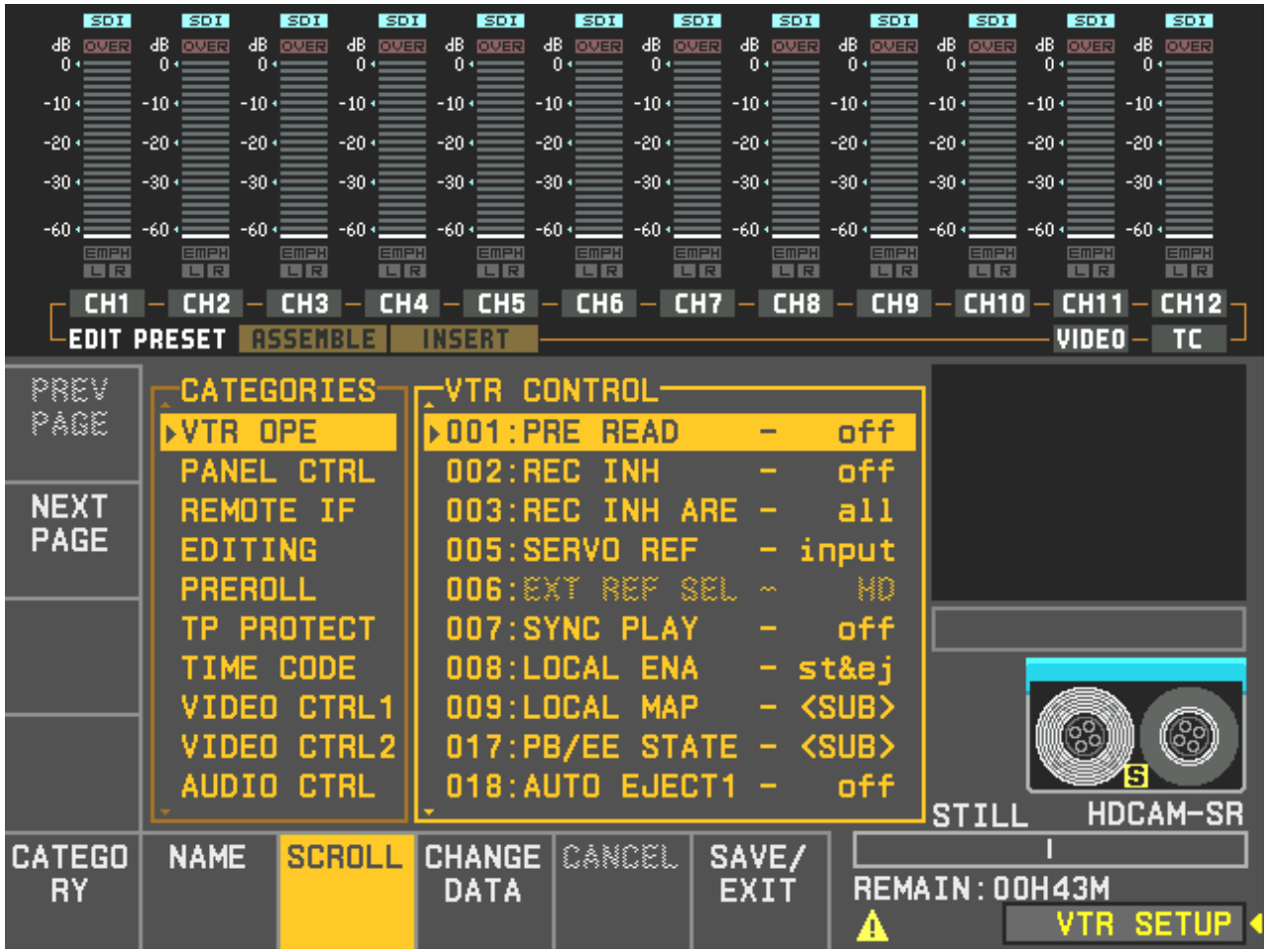


PF ASSIGN

HOME
F1 : K23
F2 : 002
F3 : K01
F4 : K02
F5 : K03
F6 : INS
F7 : K16
F8 :
F9 :
TC
F1 : 602
F2 : K22
F3 : K21
F4 : K20
F5 : 603
F6 : 607
F7 : 606
F8 : 609
F9 : 601
VIDEO
F1 :
F2 : 005
F3 :
F4 : 708
F5 : 709
F6 : 710
F7 : 711
F8 : 712
F9 : 713
AUDIO
F1 : AUD
F2 :
F3 : DIG
F4 : ANA
F5 : SDO
F6 :
F7 :
F8 :
F9 :
PF1
F1 :
F2 :
F3 :
F4 :
F5 :
F6 :
F7 :
F8 :
F9 :
PF2
F1 :
F2 :
F3 :
F4 :
F5 :
F6 :
F7 :
F8 :
F9 :
ALT+HOME
F1 : 001
F2 :
F3 : K17
F4 :
F5 :
F6 : 302
F7 : K18
F8 : 129
F9 : 017
ALT+TC
F1 : 605
F2 : PDP
F3 : TCC
F4 : A01
F5 : A03
F6 : 620
F7 : 622
F8 : 623
F9 :
ALT+VIDEO
F1 : 755
F2 : 756
F3 : 757
F4 : 758
F5 : 740
F6 : 741
F7 : 742
F8 : 743
F9 : 762
ALT+AUDIO
F1 : 317
F2 : 811
F3 : 311
F4 : 312
F5 : 817
F6 :
F7 :
F8 :
F9 :
ALT+PF1
F1 :
F2 :
F3 :
F4 :
F5 :
F6 :
F7 :
F8 :
F9 :
ALT+PF2
F1 :
F2 :
F3 :
F4 :
F5 :
F6 :
F7 :
F8 :
F9 :


PAGE
PAGE DEF.
KEY DEF.
F9
PB EE SEL
<SUB>
HOME
F2 : 002
F3 : K01
F4 : K02
F5 : K03
F6 : INS
F7 : K16
F8 :
F9 : 017
F10:
VTR SETUP menu
003:REC INH ARE
005:SERVO REF
006:EXT REF SEL
007:SYNC PLAY
008:LOCAL ENA
009:LOCAL MAP
017:PB/EE STATE
018:AUTO EJECT1
019:AUTO EJECT2
BLANK
PASTE
CANCEL
SAVE/ EXIT
REMA

SETUP / VTR SETUP



USEFUL MENUS

132: MULTI CONTROL KNOB MODE
MOVE WINDOW
SET DEFAULT *

Improves navigation of setup menu

618: LTC OUTPUT PHASE
INPUT
AUTO
OUTPUT *

EDIT: LTC Output Phase = Input

PB/REC: LTC Output Phase = Output

780: DUAL STREAM SELECT

STREAM B

STREAM A*

Used to select different PB streams when replaying Dual Stream tapes from SRW-1

809: DJ SOUND

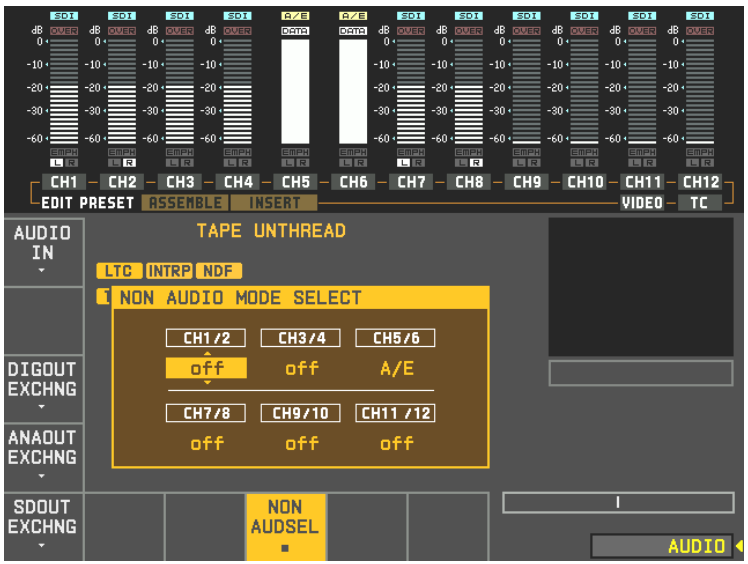
OFF

ON*

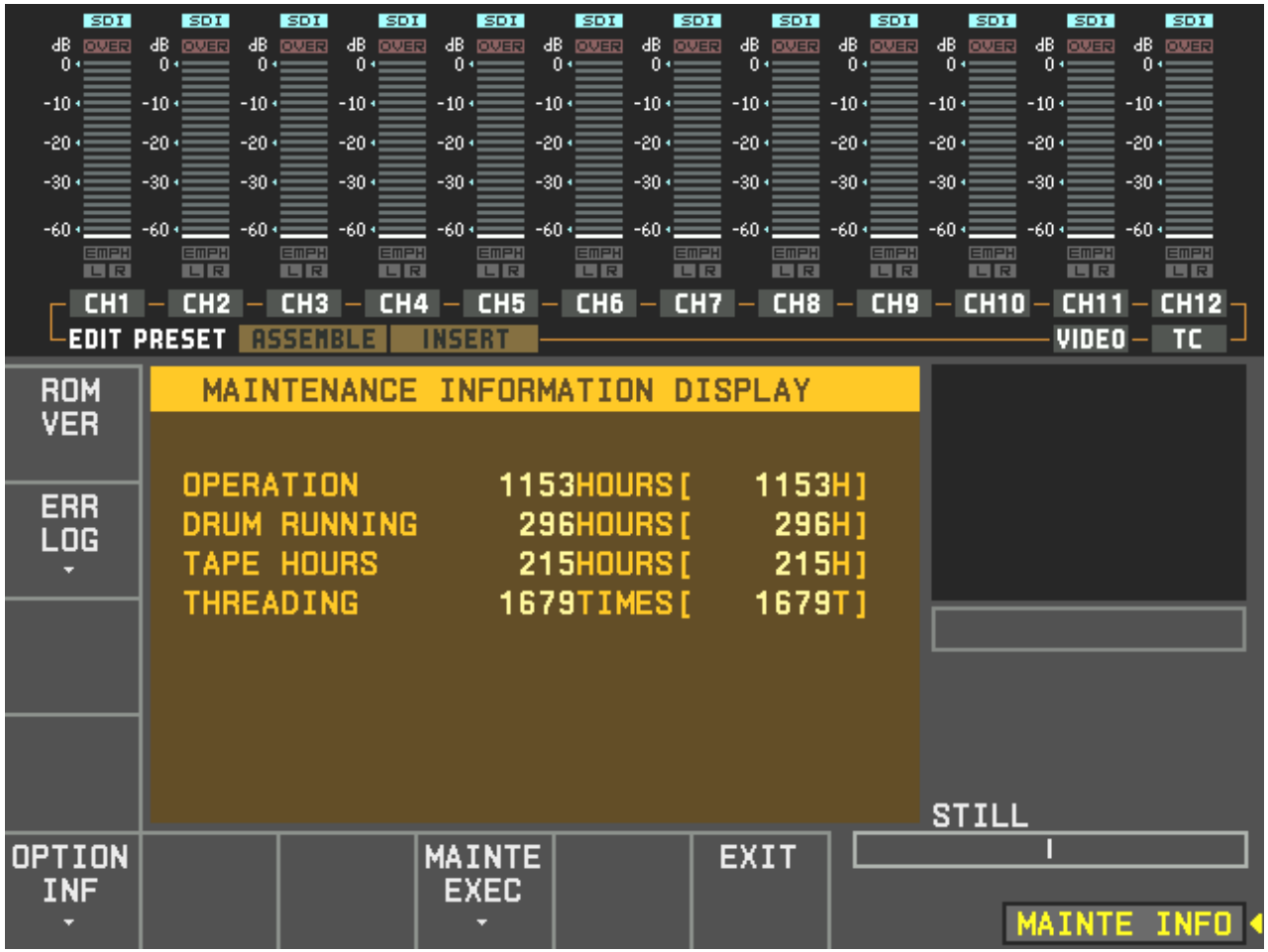
Set to OFF to improve audio jog accuracy when editing

831: NON AUDIO SELECT
CH 1/2, 3/4, 5/6, 7/8, 9/10, 11/12
AES
SDI
OFF*

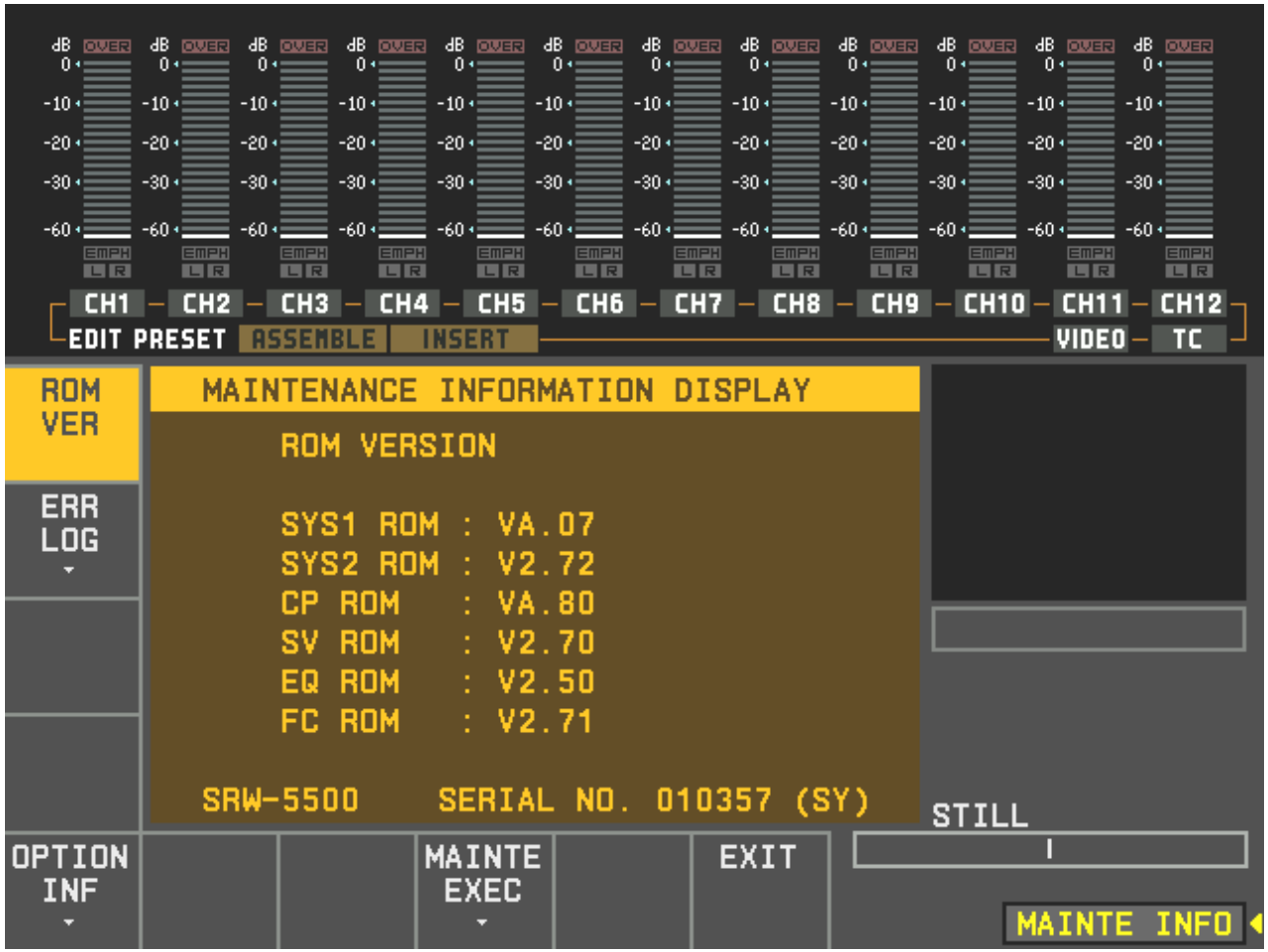
Use to set record channels for Dolby E or AC-3 data



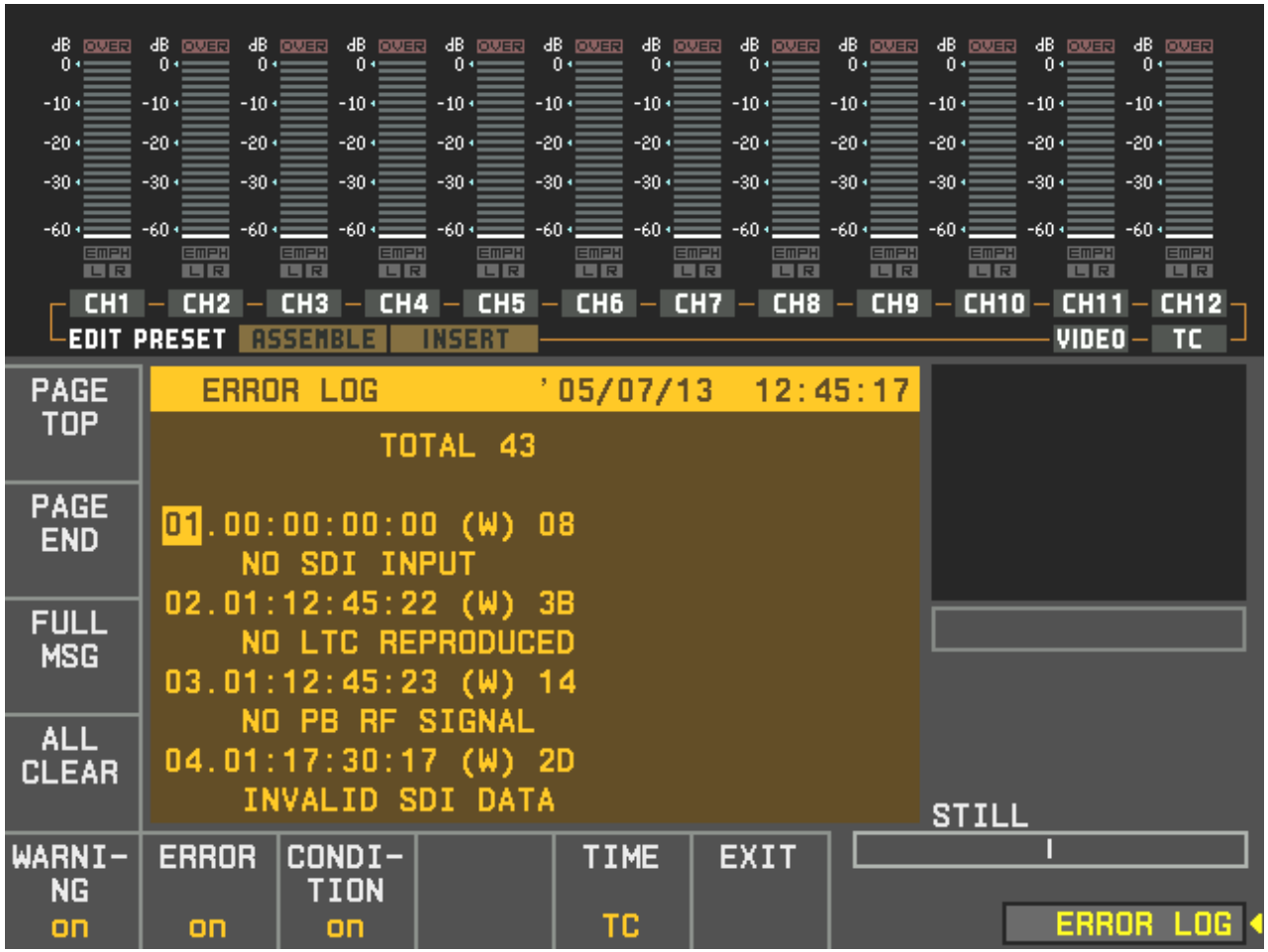
SFT + DIAG


SDI
dB
OVER
0
-10
-20
-30
-60
EMPH
L R
CH1 CH2 CH3 CH4 CH5 CH6 CH7 CH8 CH9 CH10 CH11 CH12
EDIT PRESET
ASSEMBLE
INSERT
VIDEO
TC
ROM VER
ERR LOG
MAINTENANCE INFORMATION DISPLAY
OPERATION 1153HOURS[1153H]
DRUM RUNNING 296HOURS[296H]
TAPE HOURS 215HOURS[215H]
THREADING 1679TIMES[1679T]
STILL
OPTION INF
MAINTE EXEC
EXIT
MAINTE INFO

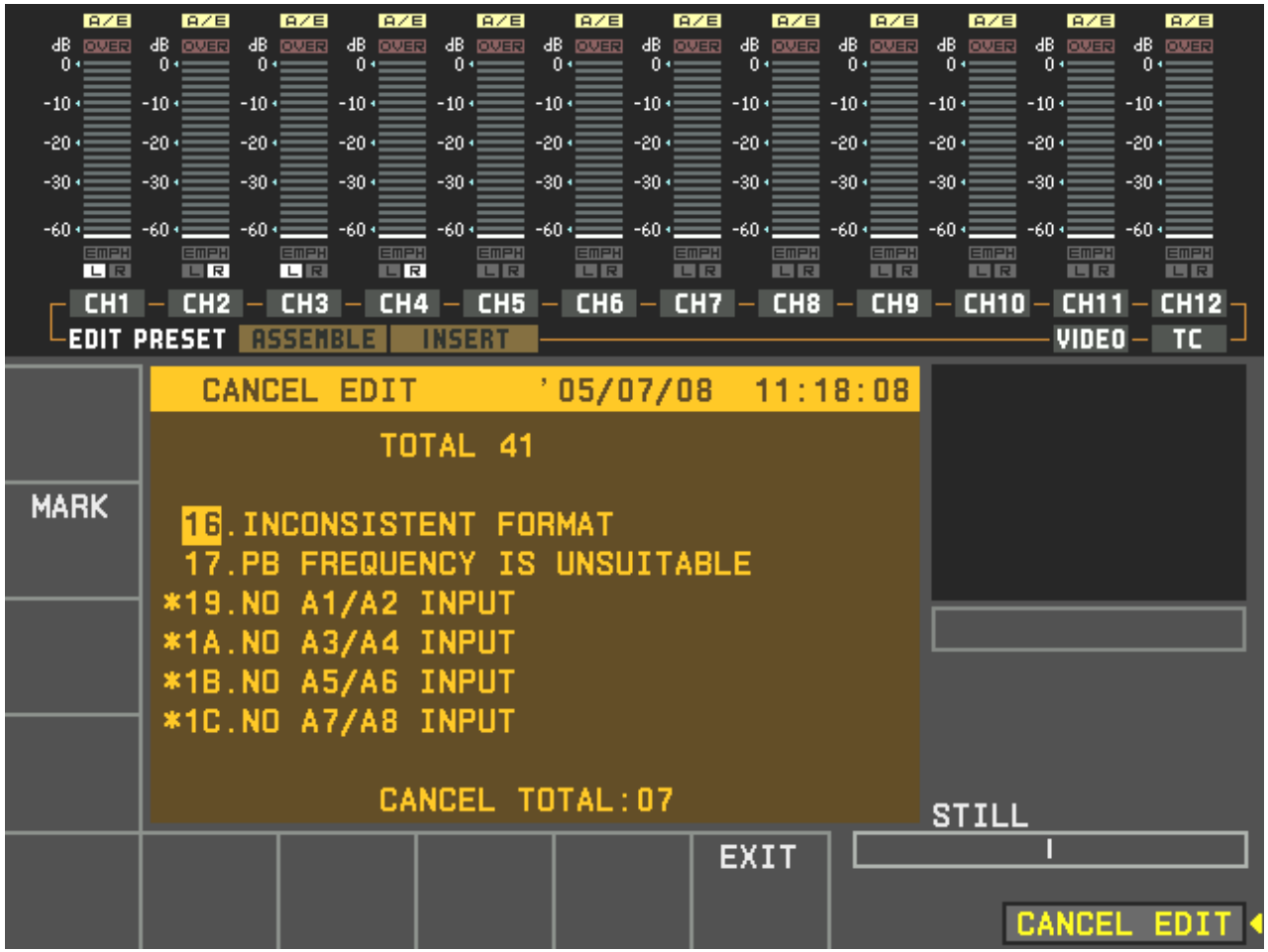
SFT + DIAG / ROM VER



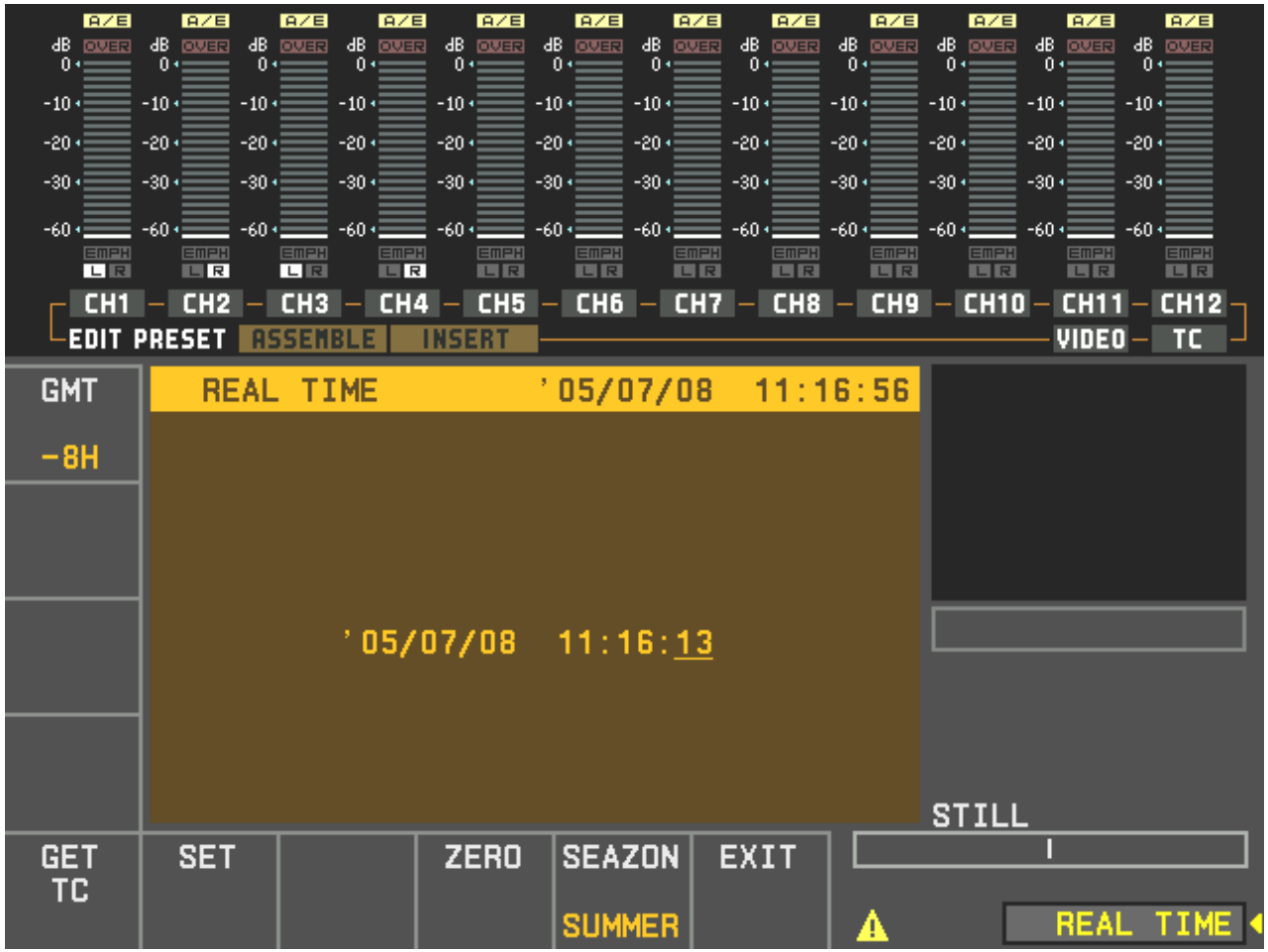
SFT + DIAG / ERROR LOG



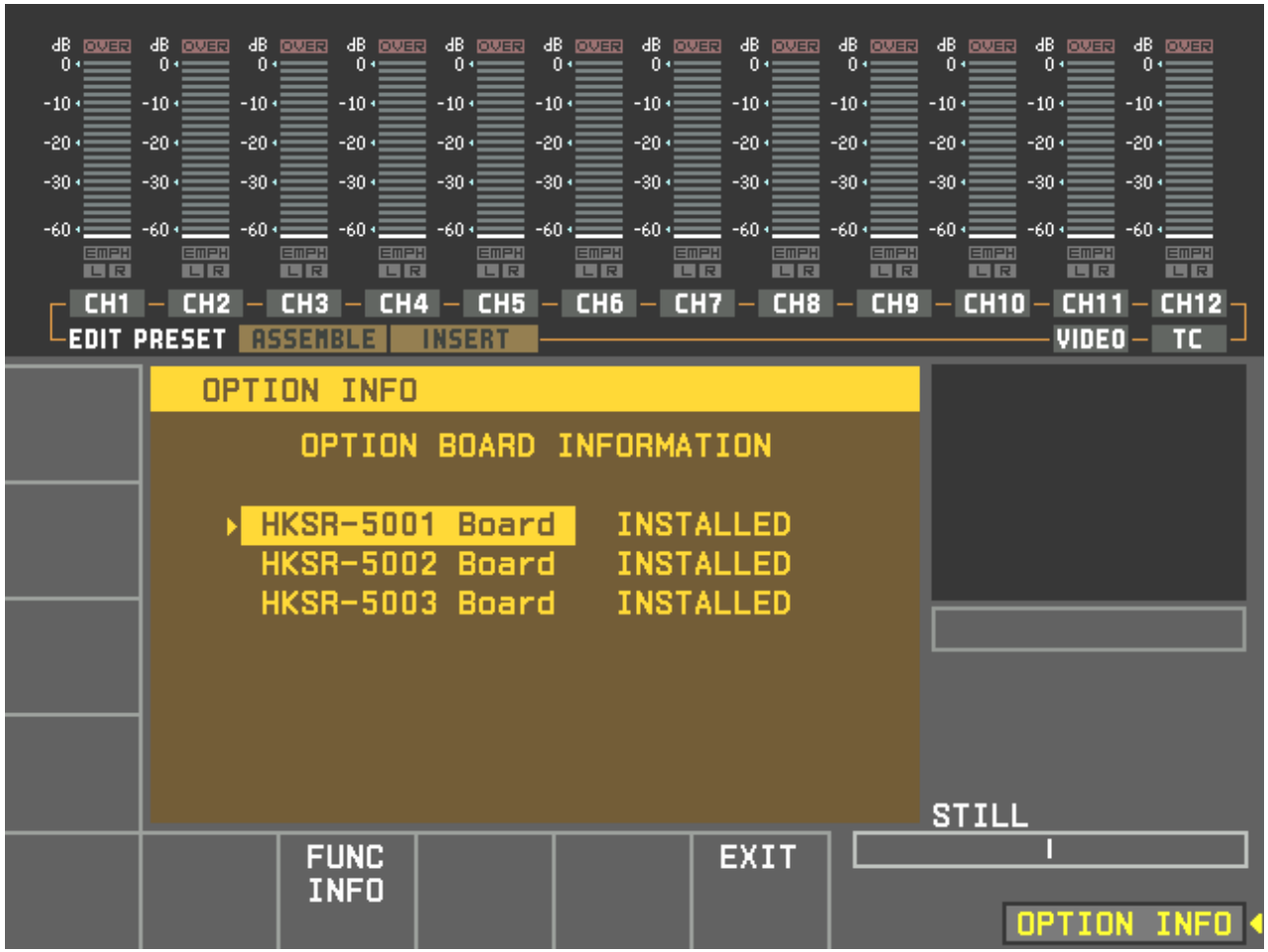
SFT + DIAG / ERROR LOG / ALT CANCEL EDIT



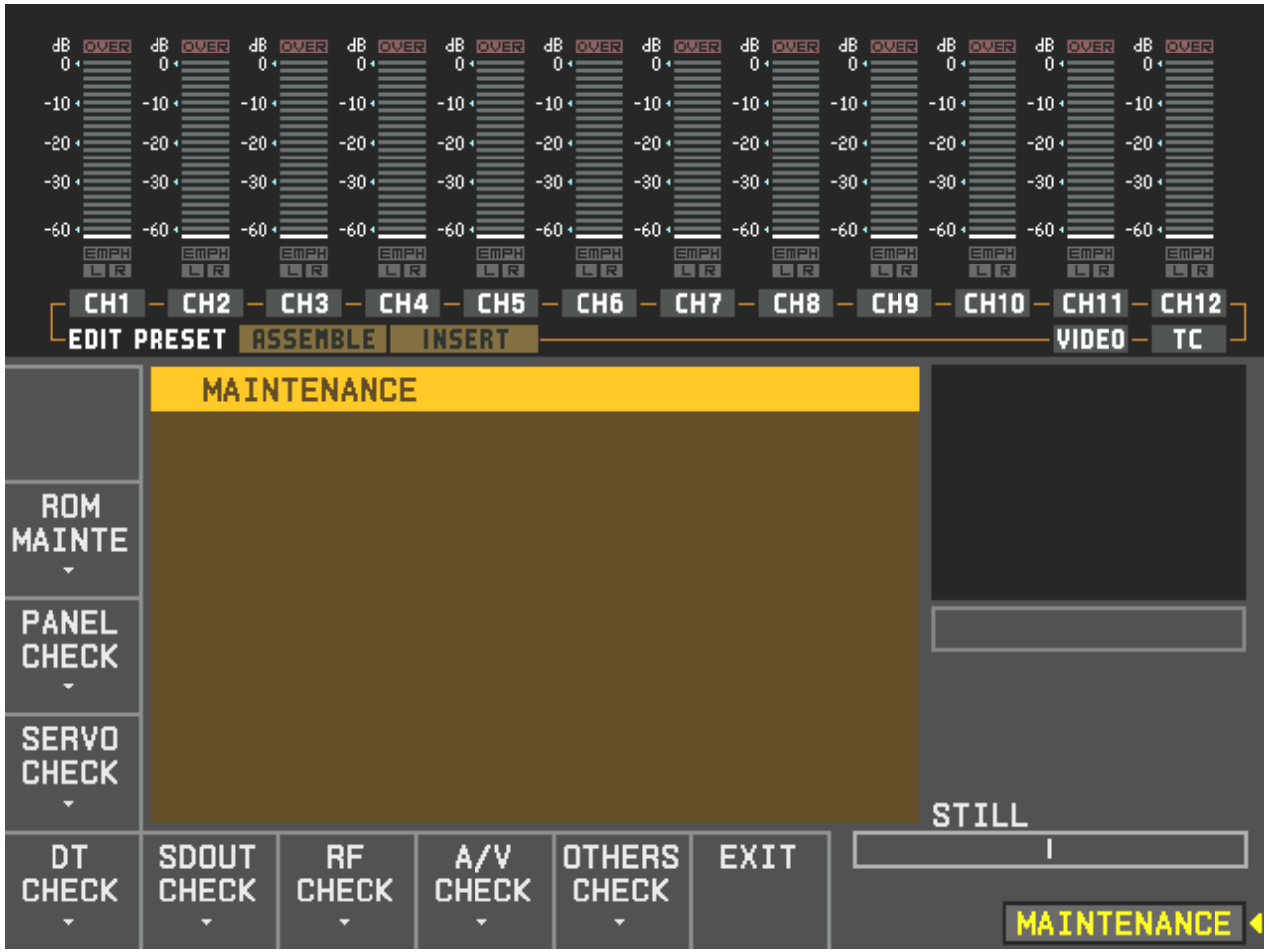
SFT + DIAG / ERROR LOG / ALT REAL TIME



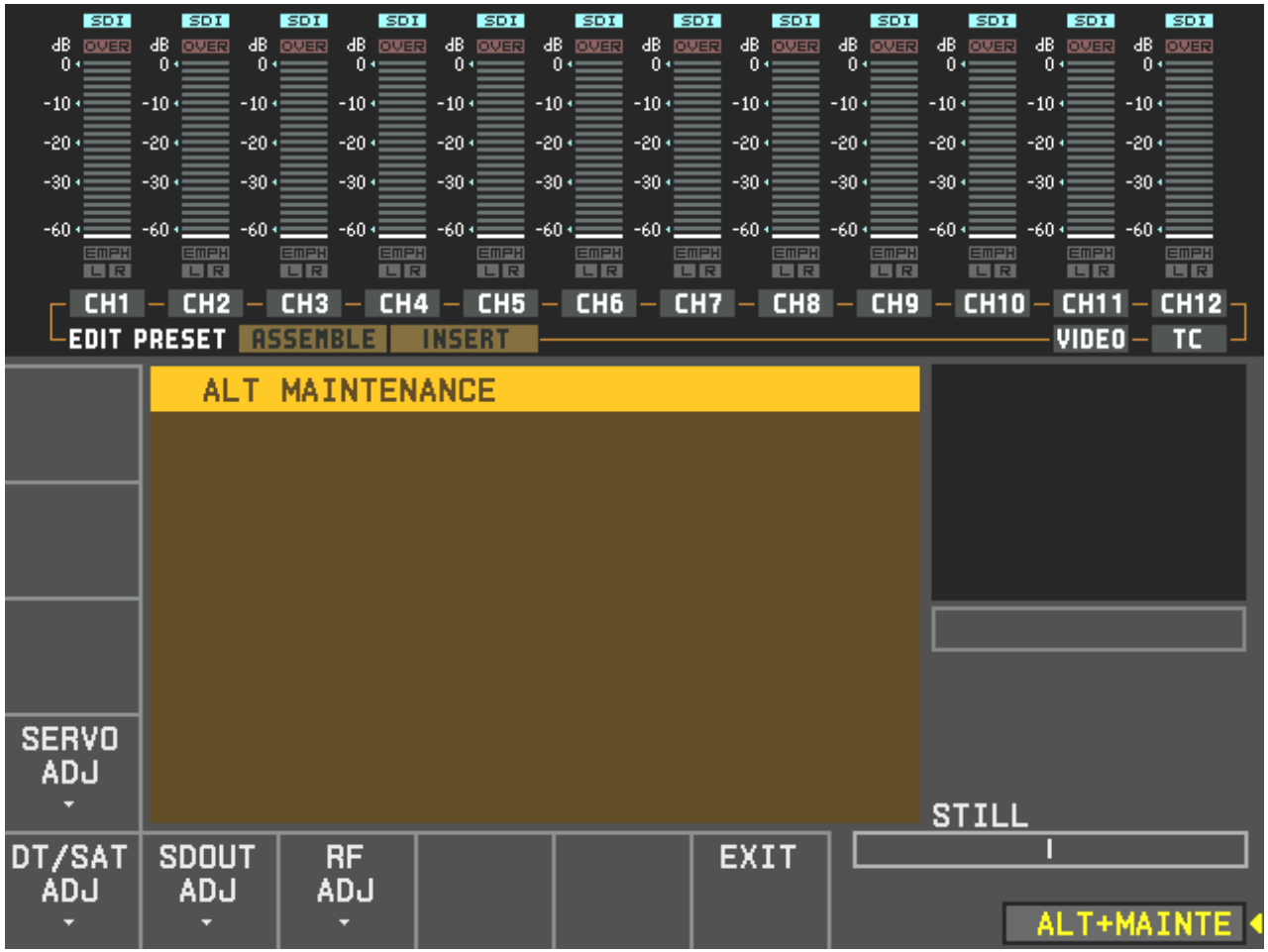
SFT + DIAG / OPTION INFO



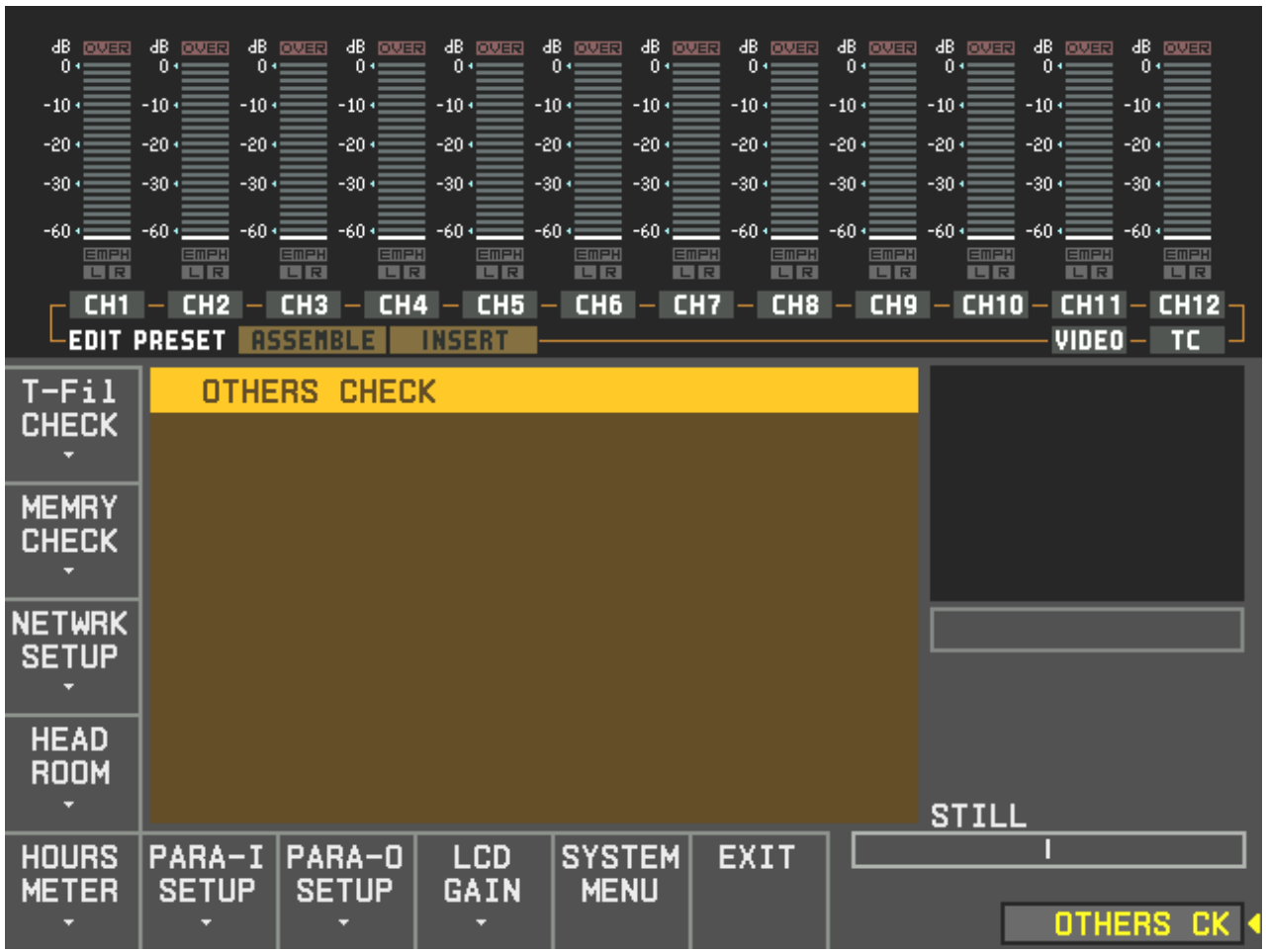
SFT + DIAG / SFT + MAINTE EXEC



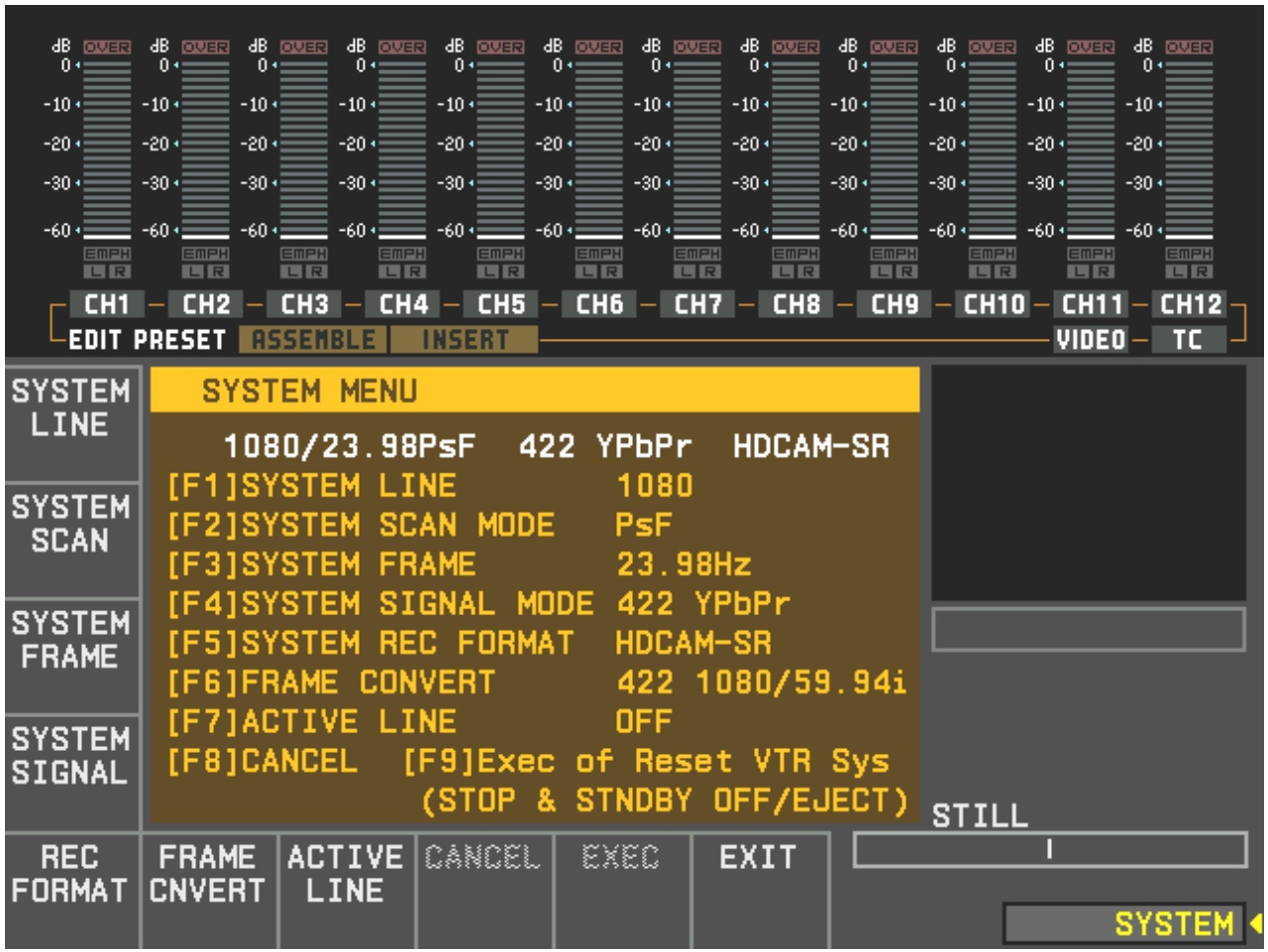
SFT + DIAG / SFT + MAINTE EXEC / ALT



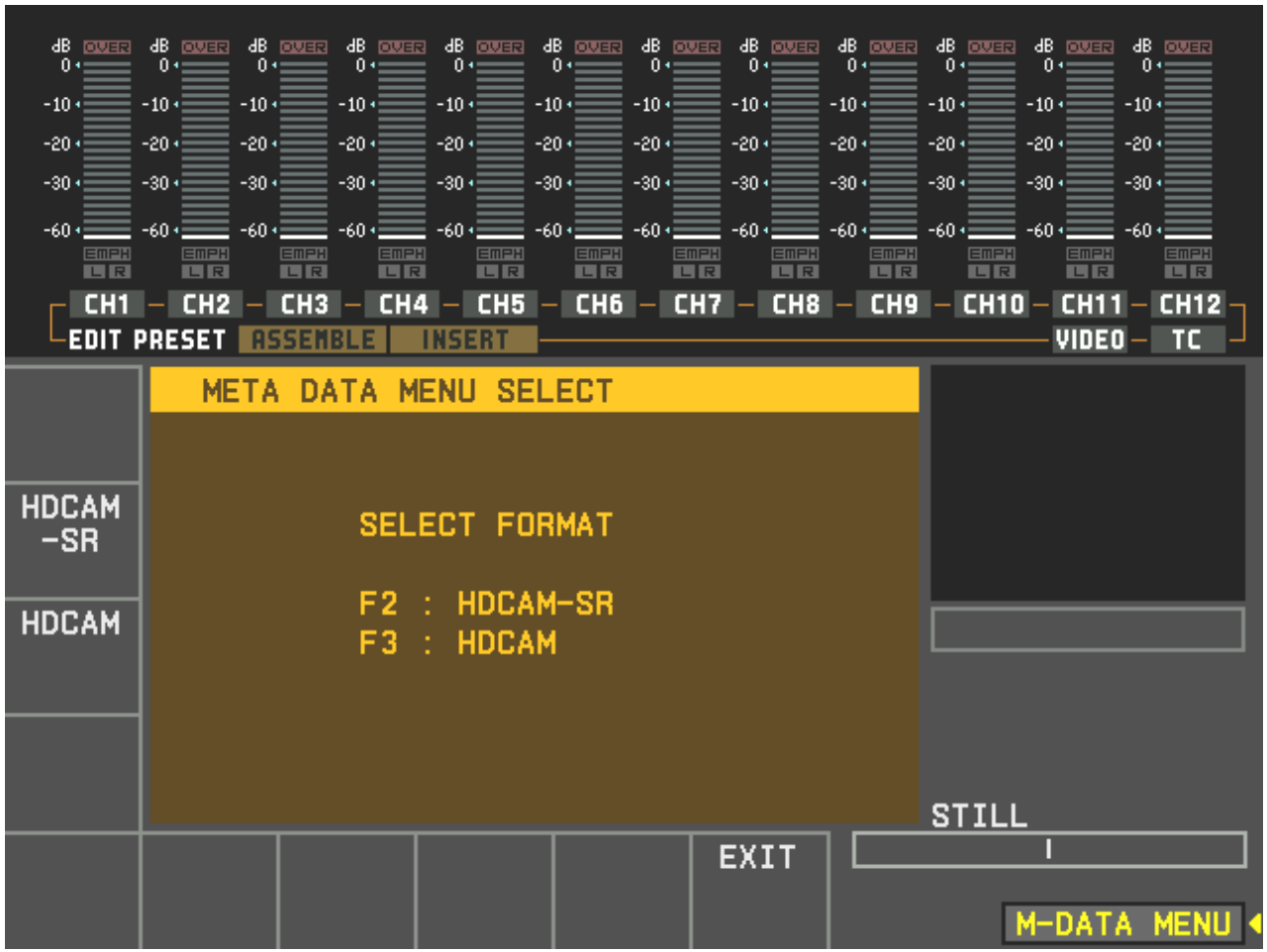
SFT + DIAG / MAINTE EXEC / OTHERS CHECK



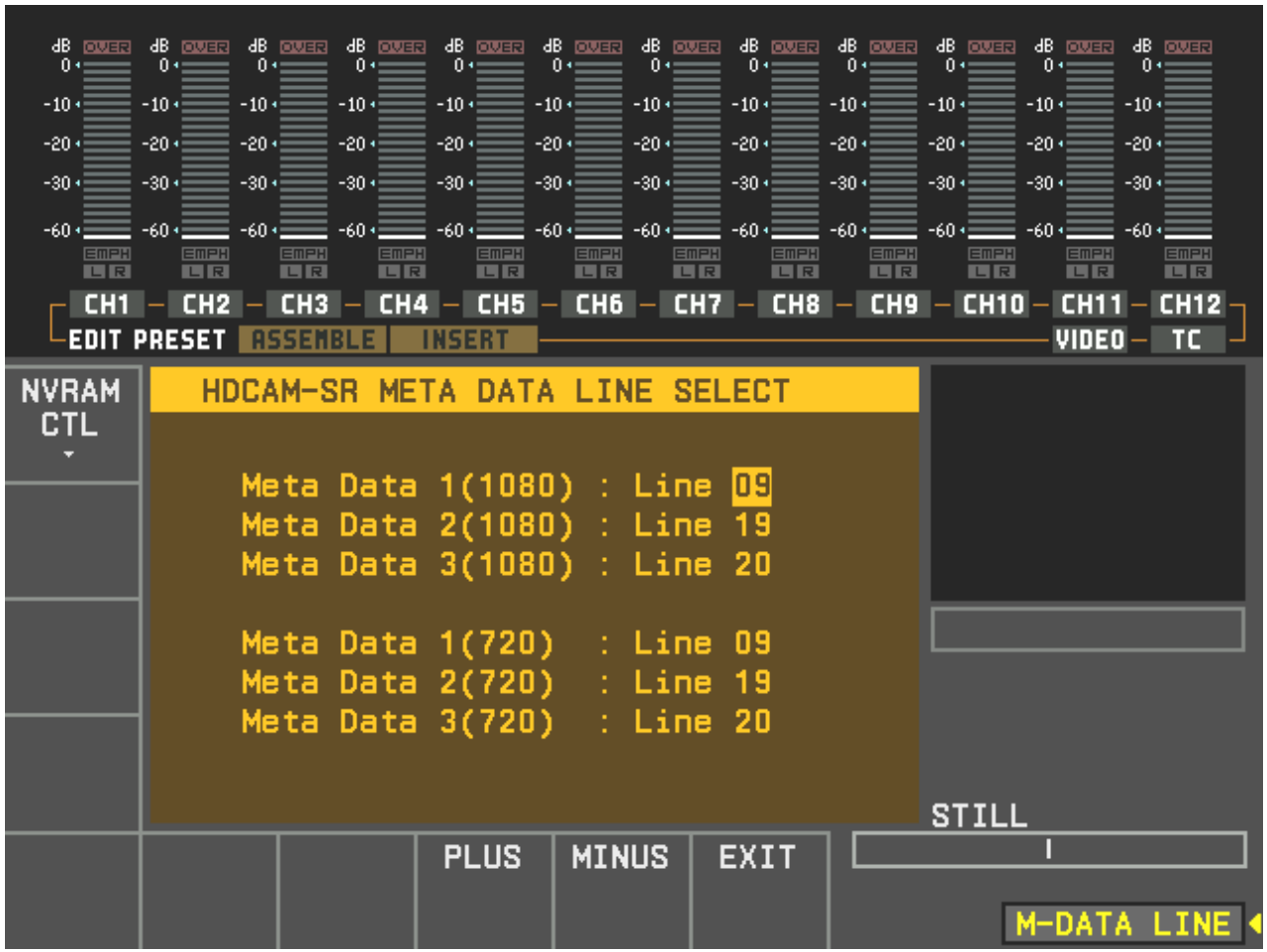
SFT + DIAG / MAINTE EXEC / OTHERS CHECK / SYSTEM MENU



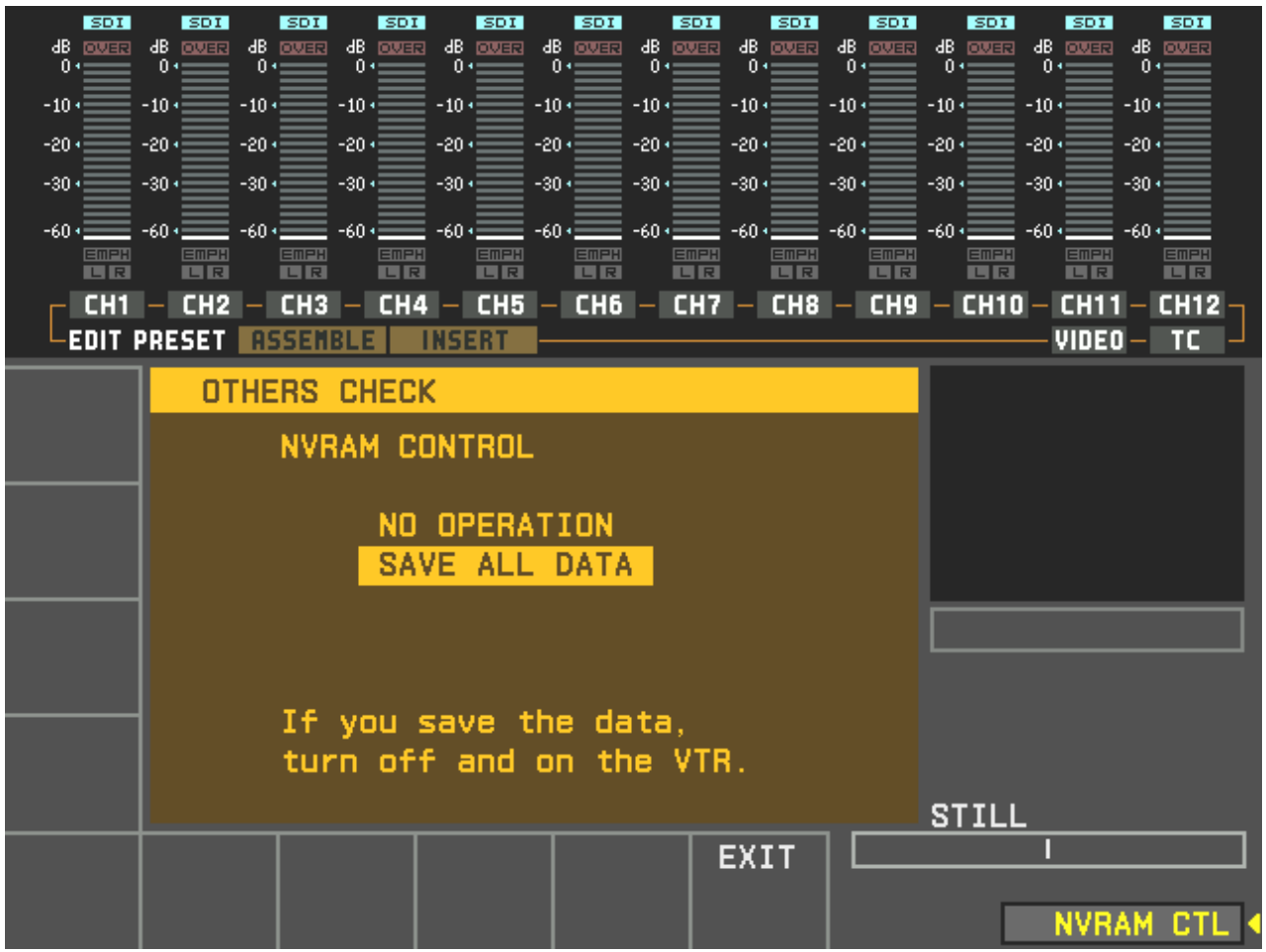
SFT + DIAG / MAINTE EXEC / OTHERS CHECK / ALT / METADATA



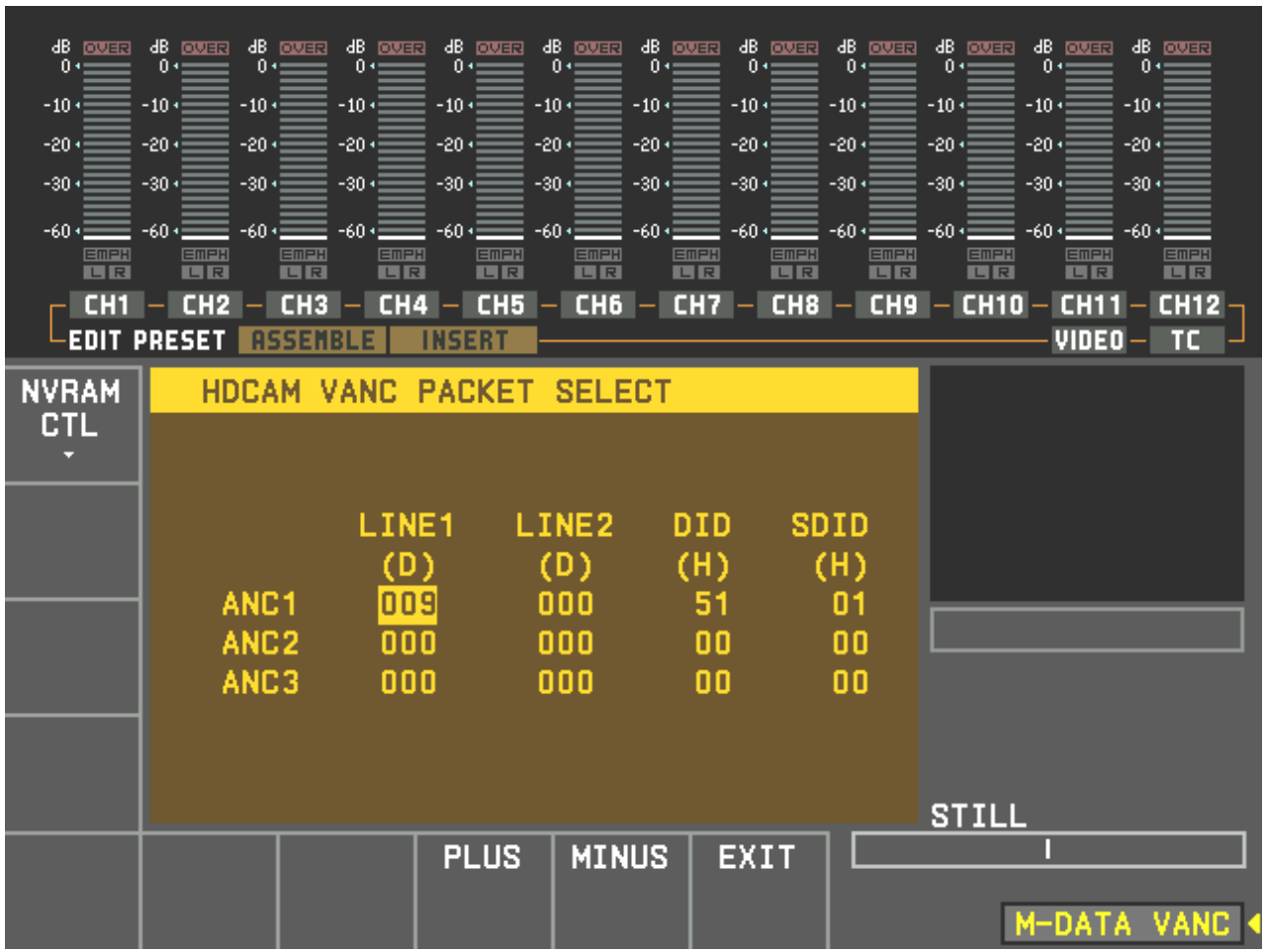
OTHERS CHECK / ALT / METADATA HDCAM SR



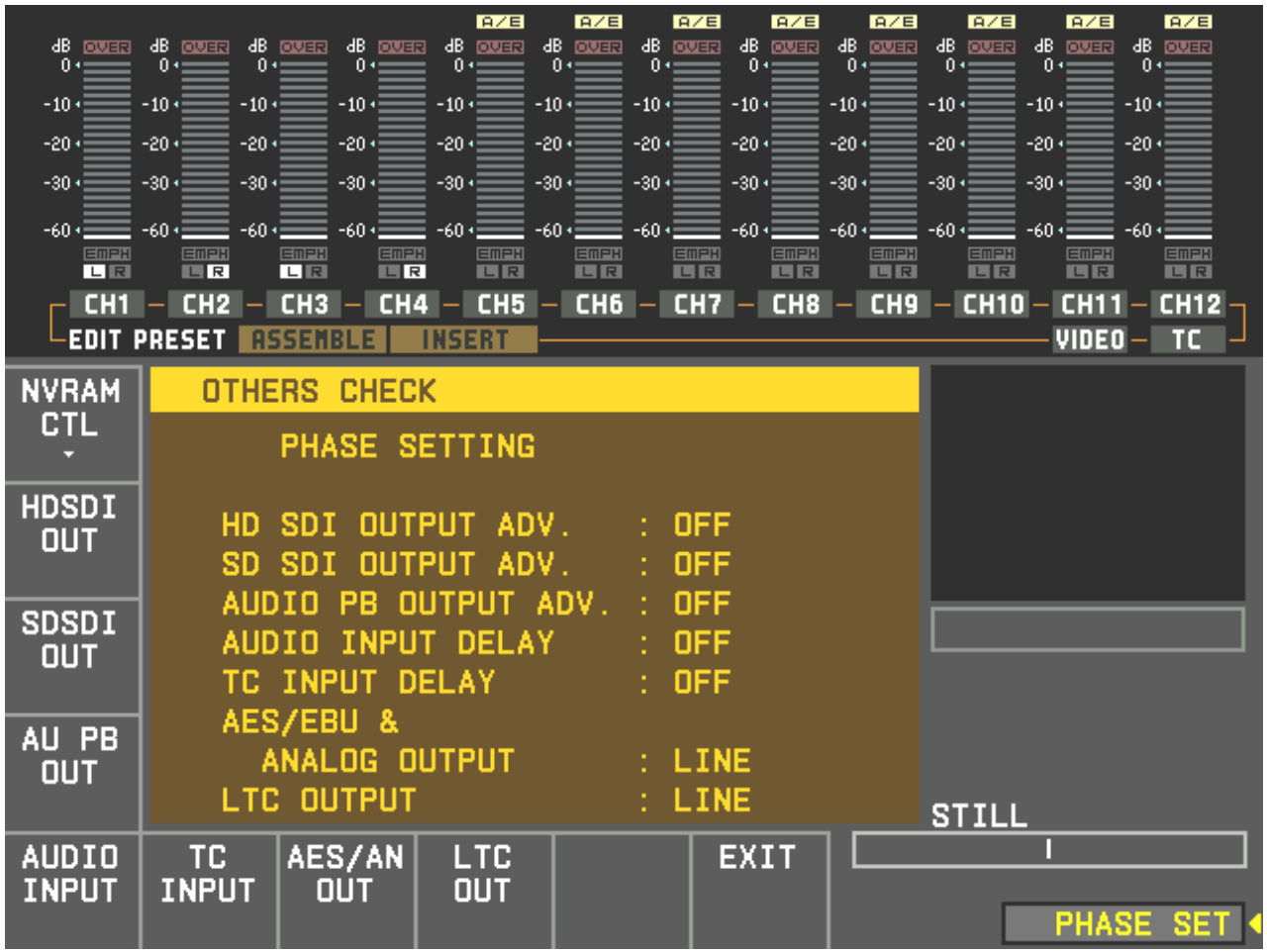
OTHERS CHECK / ALT / METADATA HDCAM SR



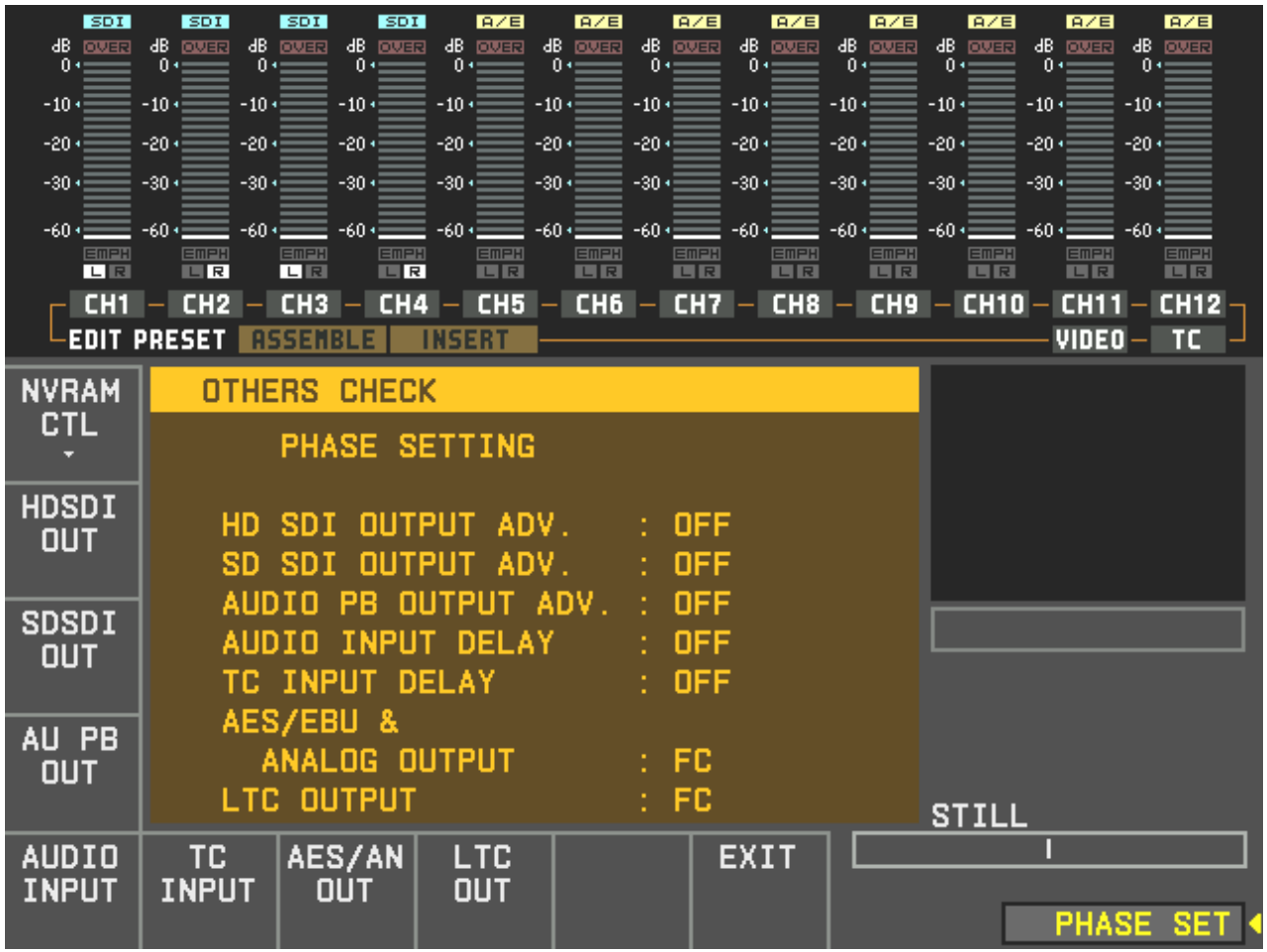
OTHERS CHECK / ALT / METADATA HDCAM (SRW-5500)



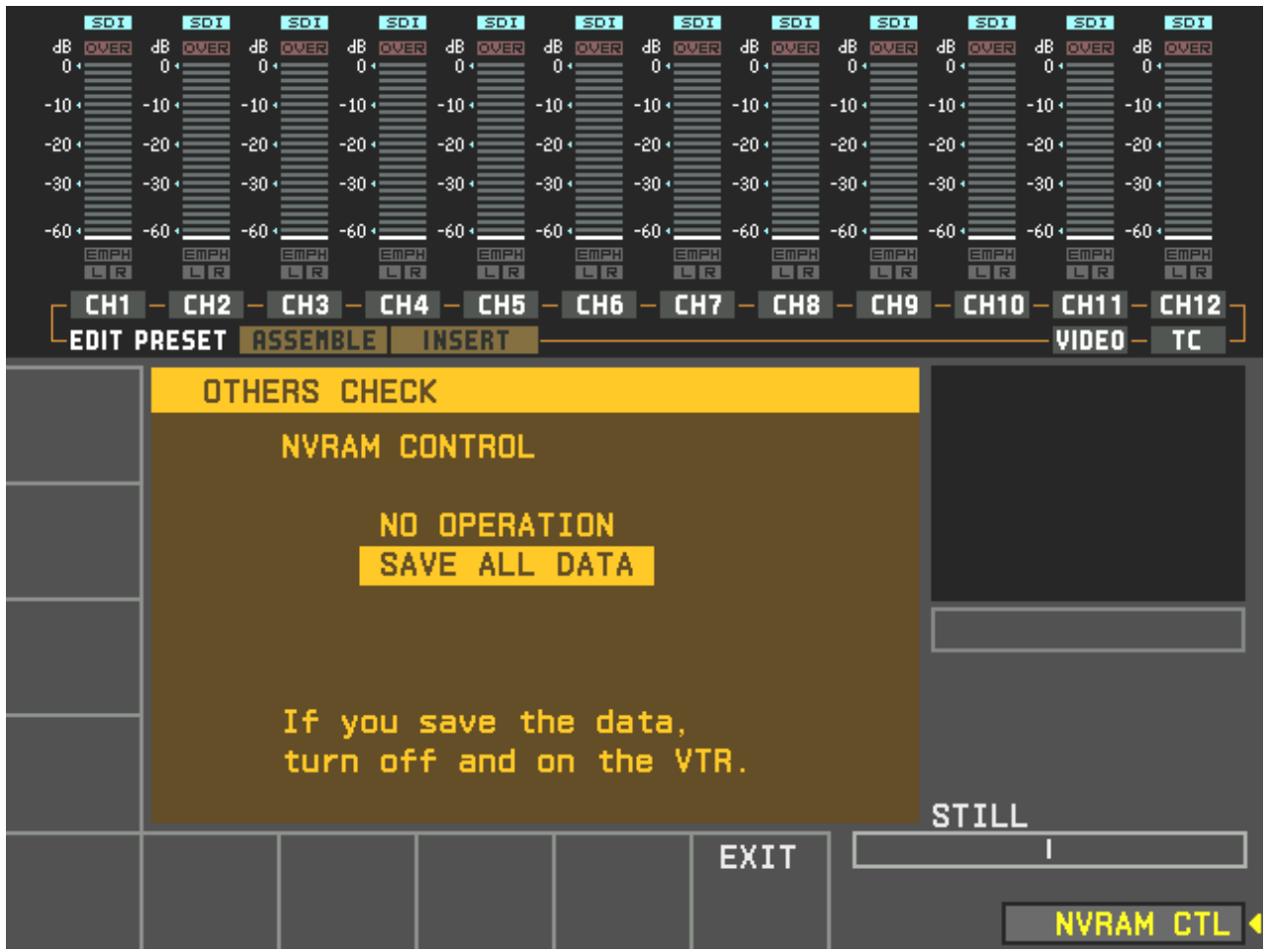
SFT + DIAG / MAINTE EXEC / OTHERS CHECK / ALT / PHASE SET



SFT + DIAG / MAINTE EXEC / OTHERS CHECK / ALT / PHASE SET



SFT + DIAG / MAINTE EXEC / OTHERS CHECK / ALT / PHASE SET



HD SDI OUTPUT ADV

OFF

90H

Use for external downconverter to compensate for delay.

SD SDI OUTPUT ADV

OFF

2H

Use for external D1 → D2 conversion.

AUDIO PB OUTPUT ADV

OFF

1 FRAME

Use for DOLBY E playback to compensate for decoder delay.

AUDIO INPUT DELAY

OFF

1 FRAME

Use to compensate for 1 frame CCD delay when recording from HD camera.

TC INPUT DELAY

OFF

1 FRAME

Use to compensate for 1 frame CCD delay when recording from HD camera.

AES/EBU & ANALOG AUDIO OUTPUT

LINE

SD

FC

When in 23.98PsF mode the AES/EBU & Analog audio output phase can be changed to match the Format Converter & Downconverter video phase.

LINE = In phase with MAIN output (23.98PsF)
SD = In phase with the Downconverter output.
FC = In phase with the Format Converter output.

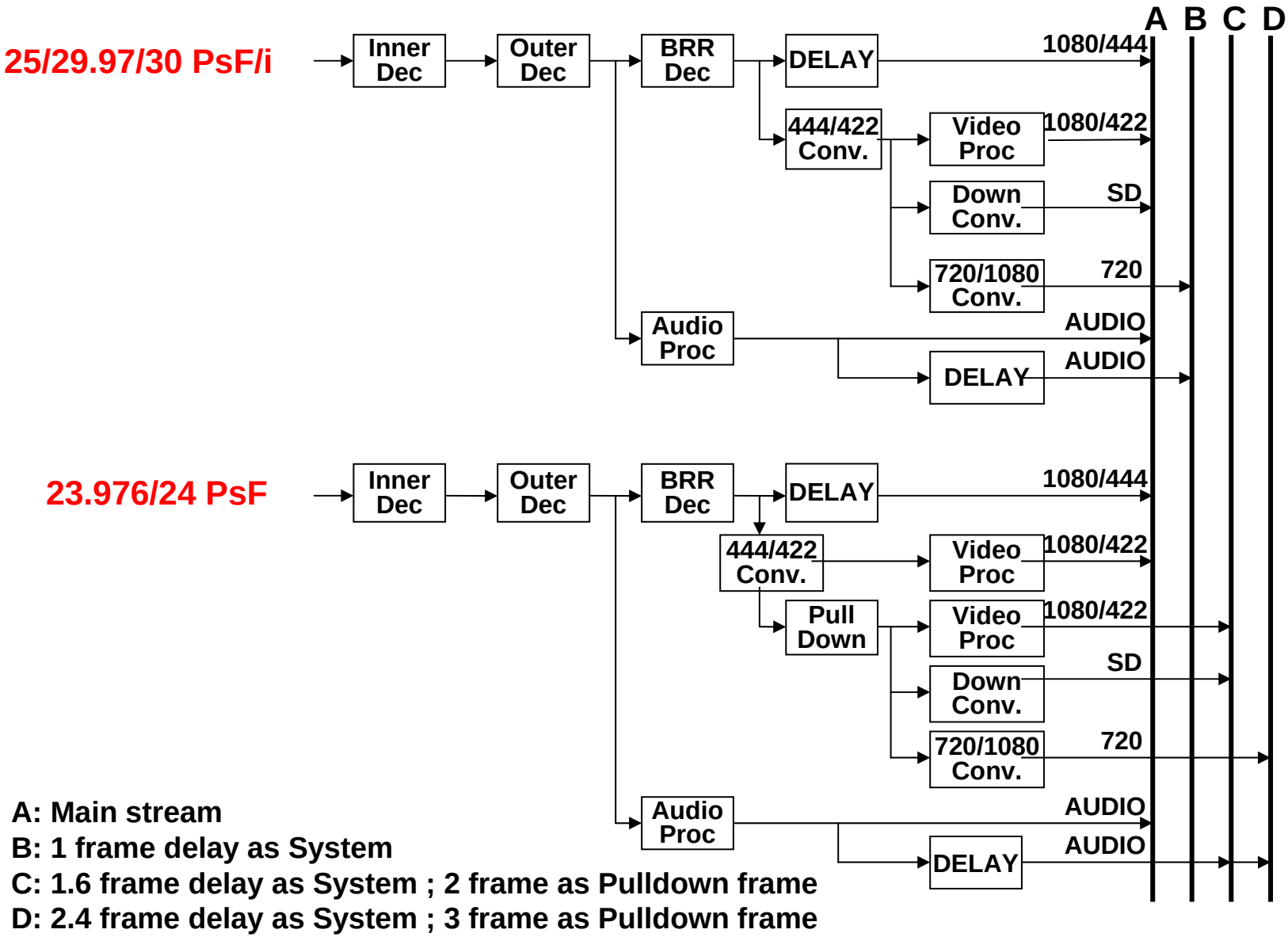
Note: SD setting is available in case SD SDI OUTPUT ADV is set to 2H.

Normal operation only requires LINE or FC.

LTC OUTPUT
LINE
FC

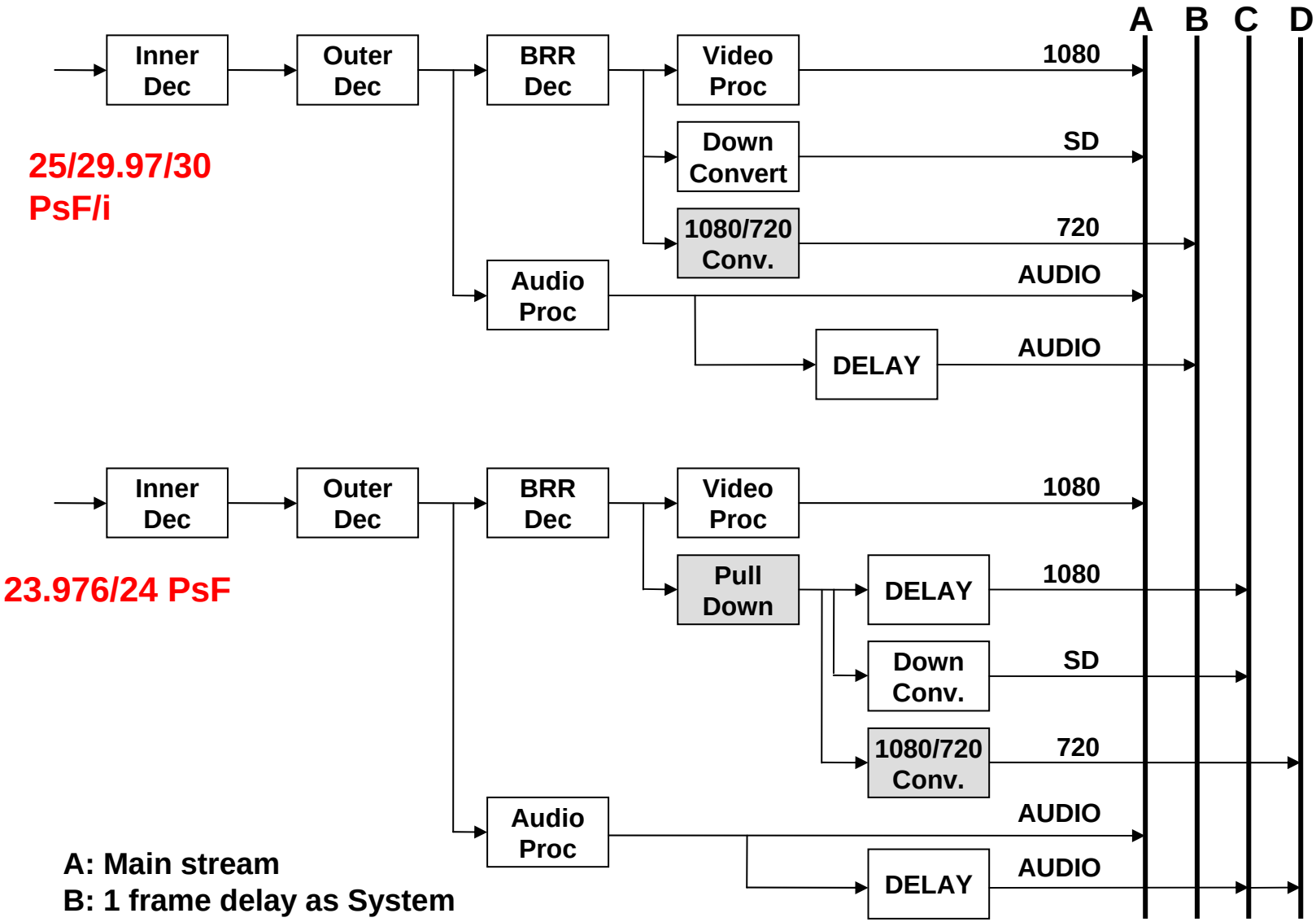
LINE = LTC output same as frame rate of tape (24F)
FC = LTC output is converted from 24F to 30F (NDF or DF)
Setting follows the PDPSET menu.
LTC output has same phase as the Format Converter output.

SYSTEM DELAY INFORMATION



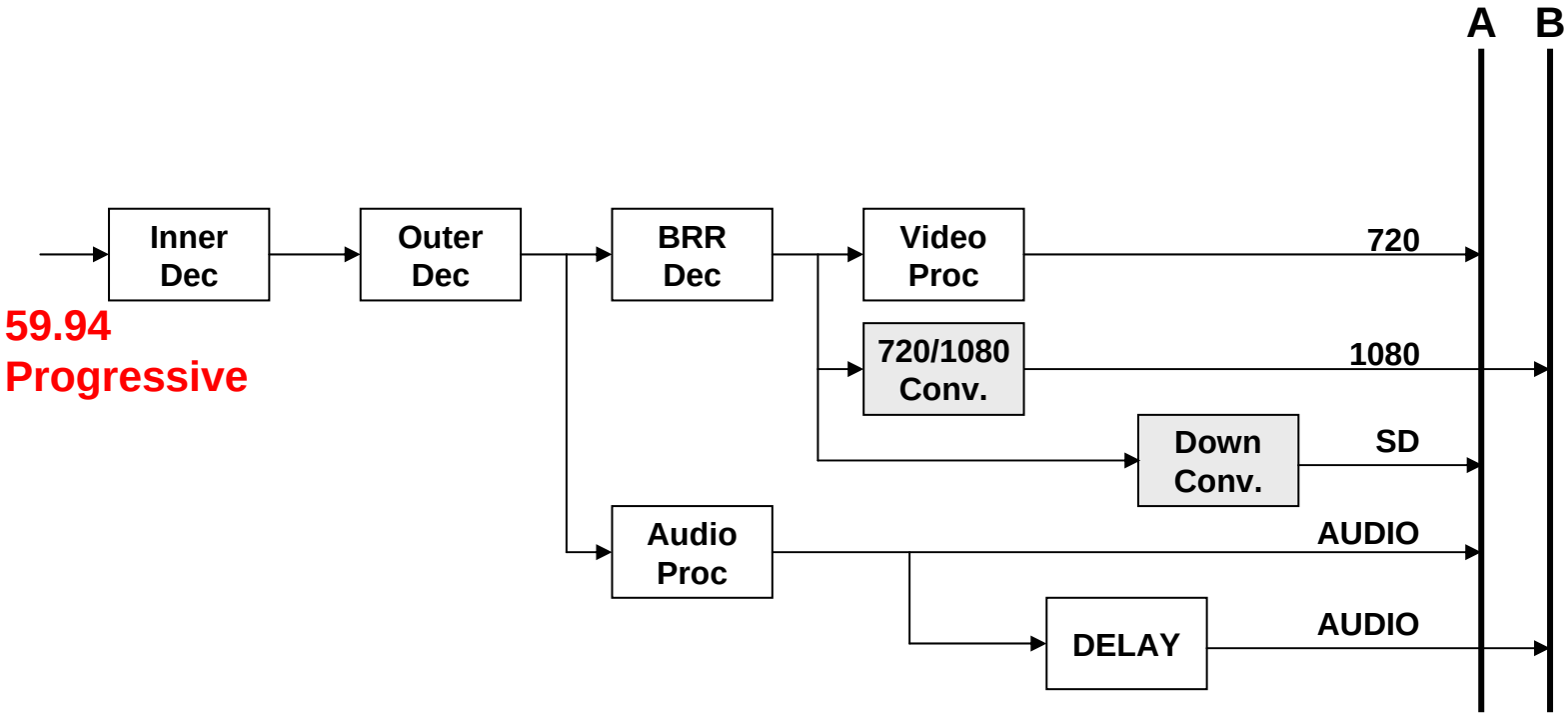
A: Main stream
B: 1 frame delay as System
C: 1.6 frame delay as System ; 2 frame as Pulldown frame
D: 2.4 frame delay as System ; 3 frame as Pulldown frame

HDCAM-SR 1080/444 System Delay



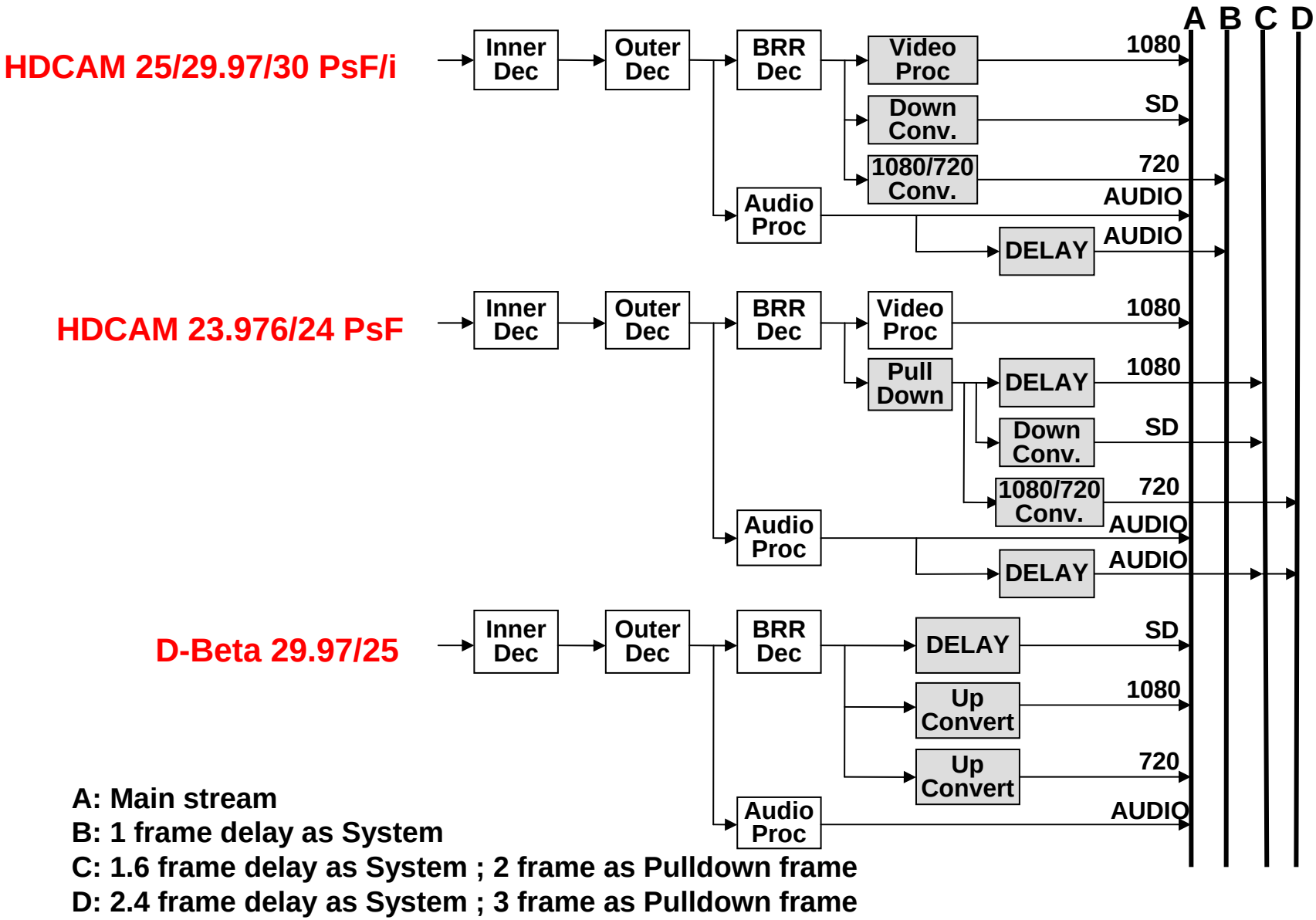
A: Main stream
B: 1 frame delay as System
C: 1.6 frame delay as System ; 2 frame as Pulldown frame
D: 2.4 frame delay as System ; 3 frame as Pulldown frame

HDCAM-SR 1080/4:2:2 System Delay



A: Main stream
B: 1 Frame delay as System

HDCAM-SR 720/4:2:2 System Delay



A: Main stream
B: 1 frame delay as System
C: 1.6 frame delay as System ; 2 frame as Pulldown frame
D: 2.4 frame delay as System ; 3 frame as Pulldown frame

HDCAM/Digital Betacam System Delay

Specifications – Format Conversion

with;
HKSR-5001
HKSR-5002
HKSR-5003

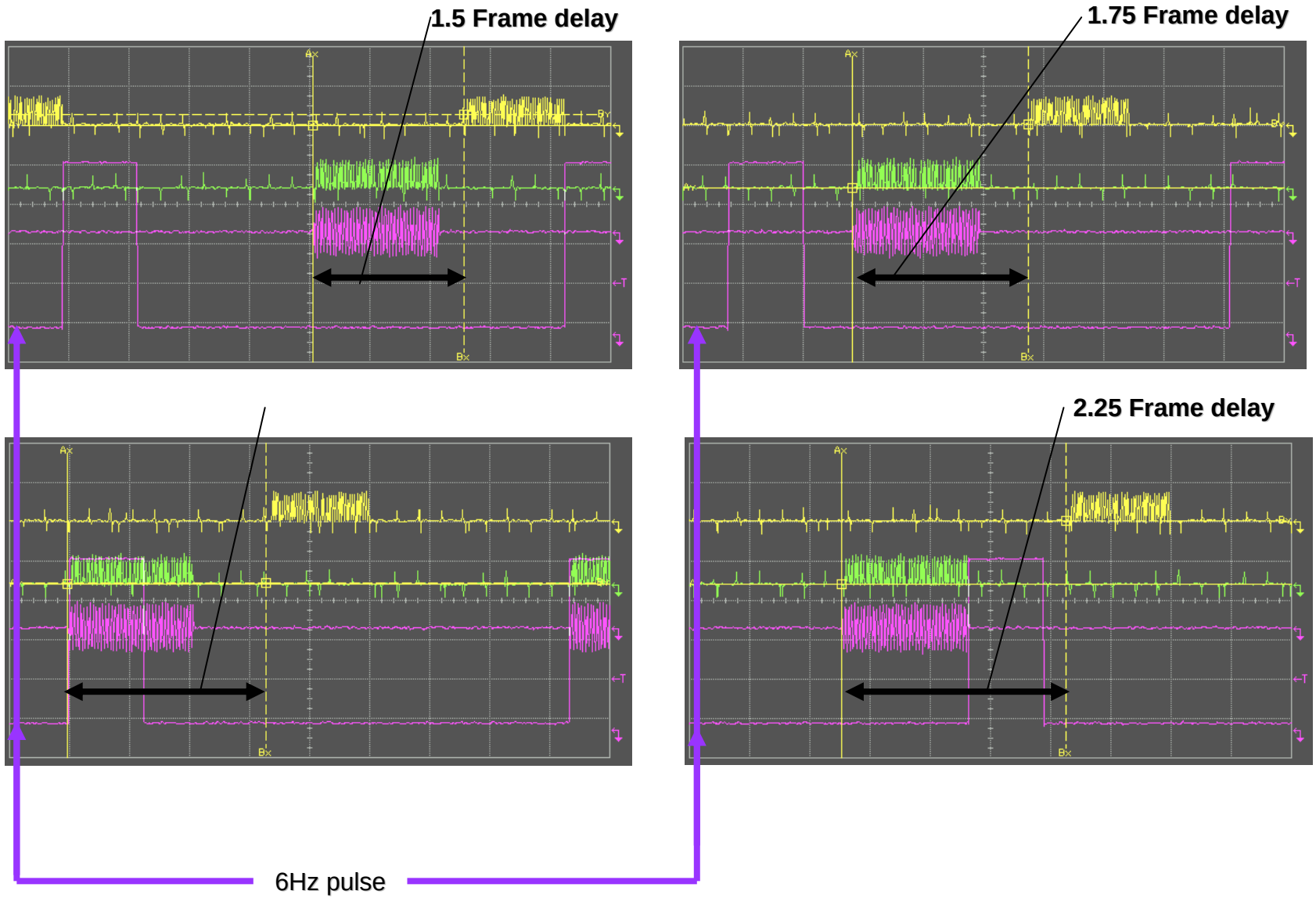
Ver. 2.70
Ver. 3.00

Playback Tape Format			HD-SDI OUT	SD-SDI OUT	Format Converter OUT
HDCAM-SR or HDCAM	1080/4:2:2	23.98PsF	1080/4:2:2/23.98PsF	525/59.94i	1080/4:2:2/59.94i
				-----	720/4:2:2/59.94P
		24PsF	1080/4:2:2/24PsF	-----	1080/4:2:2/60i
		25PsF	1080/4:2:2/25PsF	625/50i	720/4:2:2/50P
		29.97PsF	1080/4:2:2/29.97PsF	525/59.94i	720/4:2:2/59.94P
		30PsF	1080/4:2:2/30PsF	-----	-----
		50i	1080/4:2:2/50i	625/50i	720/4:2:2/50P
		59.94i	1080/4:2:2/59.94i	525/59.94i	720/4:2:2/59.94P
		60i	1080/4:2:2/60i	-----	-----
HDCAM-SR	720/4:2:2	59.94P	720/4:2:2/59.94P	525/59.94i	1080/4:2:2/59.94i
		50P	720/4:2:2/50P	625/50i	1080/4:2:2/50i
	1080/4:4:4	23.98PsF	1080/4:4:4/23.98PsF	-----	1080/4:2:2/23.98PsF
				525/59.94i	1080/4:2:2/59.94i
				-----	720/4:2:2/59.94P
		24PsF	1080/4:4:4/24PsF	-----	1080/4:2:2/24PsF
		25PsF	1080/4:4:4/25PsF	625/50i	1080/4:2:2/25PsF
					720/4:2:2/50P
		29.97PsF	1080/4:4:4/29.97PsF	525/59.94i	1080/4:2:2/29.97PsF
		30PsF	1080/4:4:4/30PsF	-----	1080/4:2:2/30PsF
		50i	1080/4:4:4/50i	625/50i	1080/4:2:2/50i
					720/4:2:2/50P
		59.94i	1080/4:4:4/59.94i	525/59.94i	1080/4:2:2/59.94i
					720/4:2:2/59.94P
		60i	1080/4:4:4/60i	-----	1080/4:2:2/60i
Digital BETACAM	525/4:2:2	59.94i	1080/4:2:2/59.94i	525/59.94i	720/4:2:2/59.94P
			720/4:2:2/59.94P	525/59.94i	1080/4:2:2/59.94i
	625/4:2:2	50i	1080/4:2:2/50i	625/50i	720/4:2:2/50P
			720/4:2:2/50P	625/50i	1080/4:2:2/50i

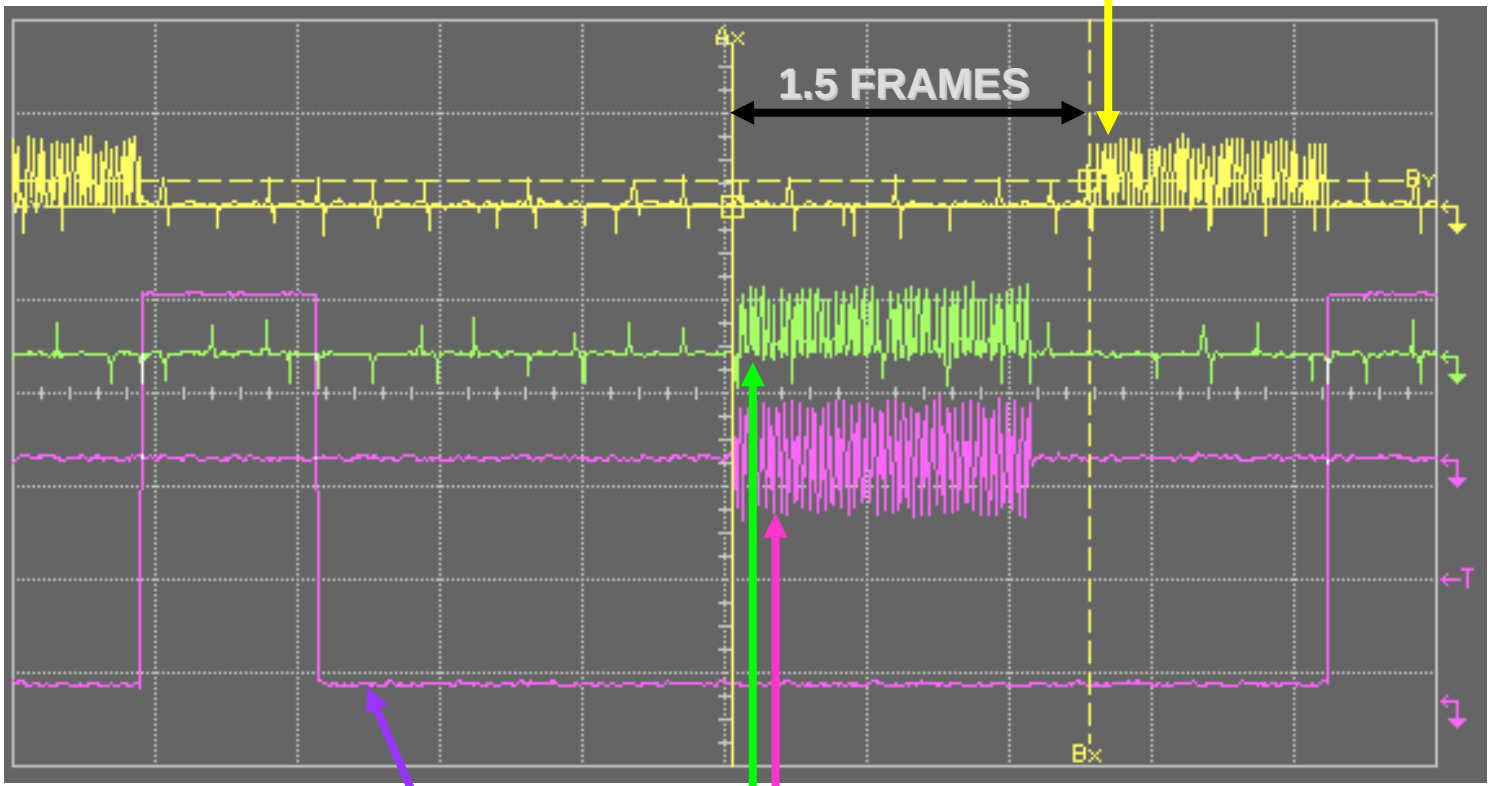
Pull Down LOCK MODE

MODE 1
MODE 2

PD LOCK MODE 1

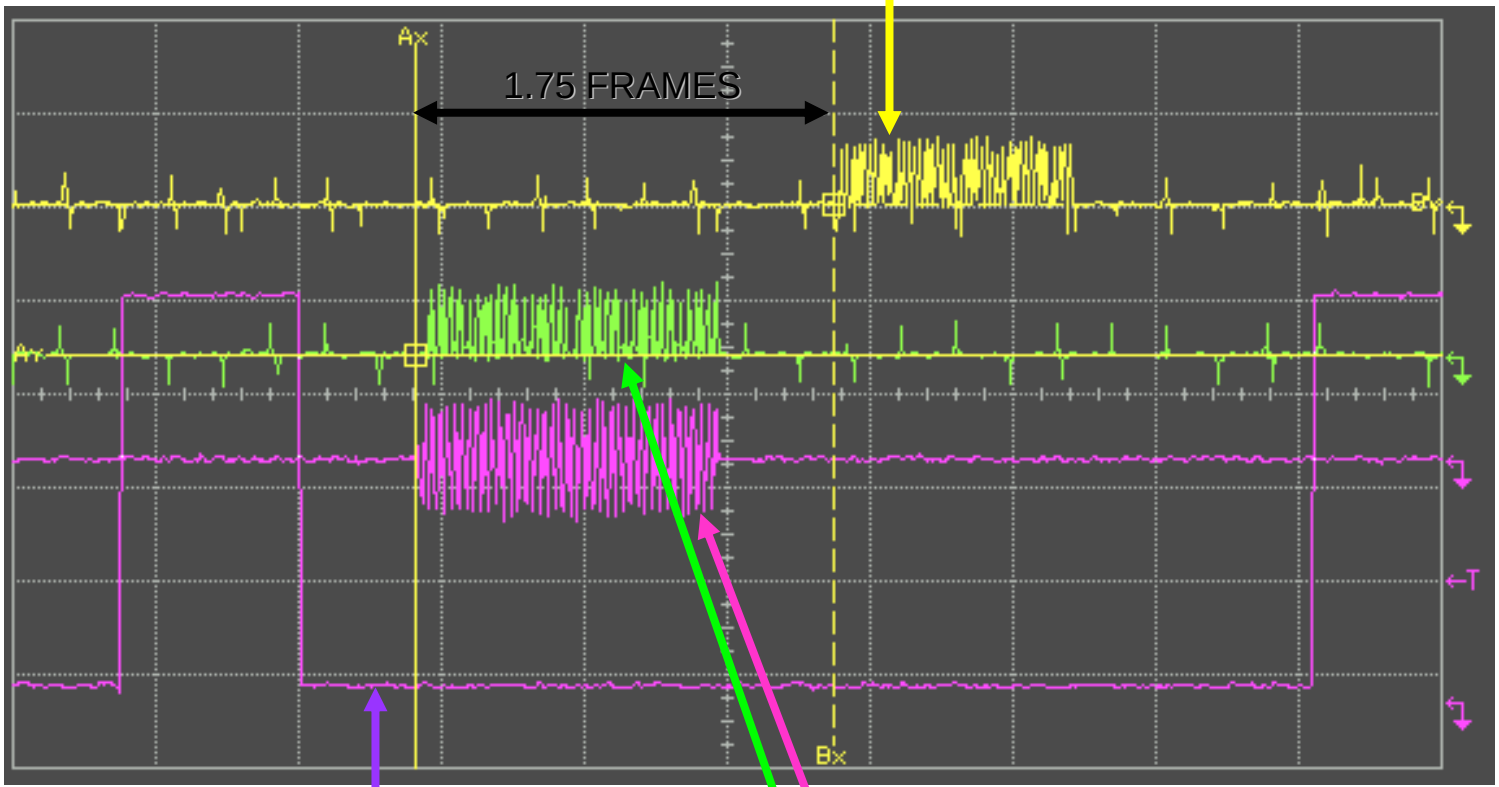


PD LOCK MODE 1


29.97 pulldown video
This is the ‘A’ frame
TC frame count = 00, 05, 10, 15, 20, 25
1.5 FRAMES
23.98 audio
6 Hz pulse
23.98 video
This is the ‘A’ frame
TC frame count = 00, 04, 08, 12, 16, 20

This example uses 30F NDF timecode

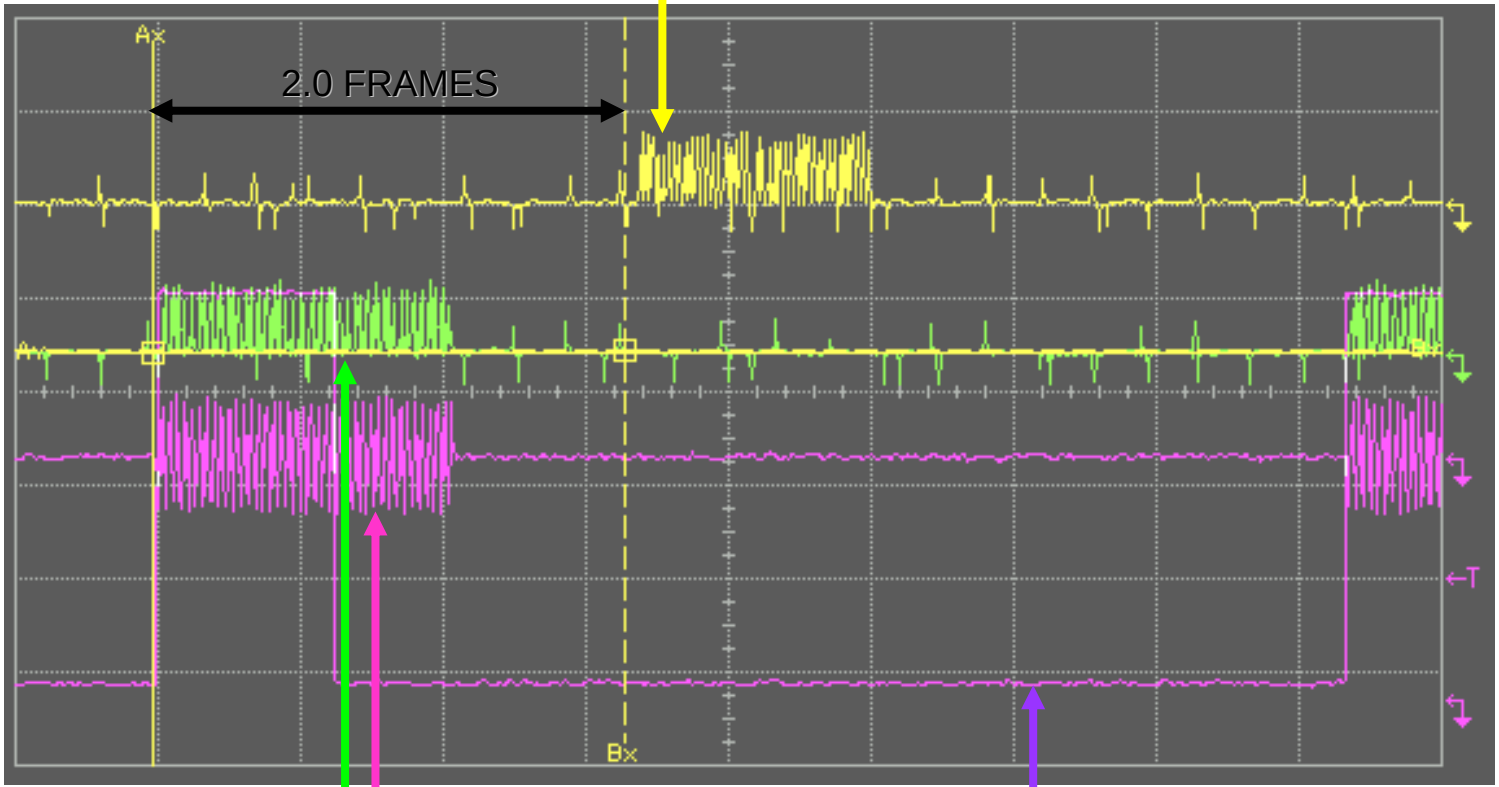
PD LOCK MODE 1


29.97 pulldown video
This is the ‘A’ frame
TC frame count = 00, 05, 10, 15, 20, 25
Ax
1.75 FRAMES
Bx
6 Hz pulse
23.98 audio
23.98 video
This is the ‘A’ frame
TC frame count = 00, 04, 08, 12, 16, 20

This example uses 30F NDF timecode

PD LOCK MODE 1

29.97 pulldown video
This is the ‘A’ frame
TC frame count = 00, 05, 10, 15, 20, 25



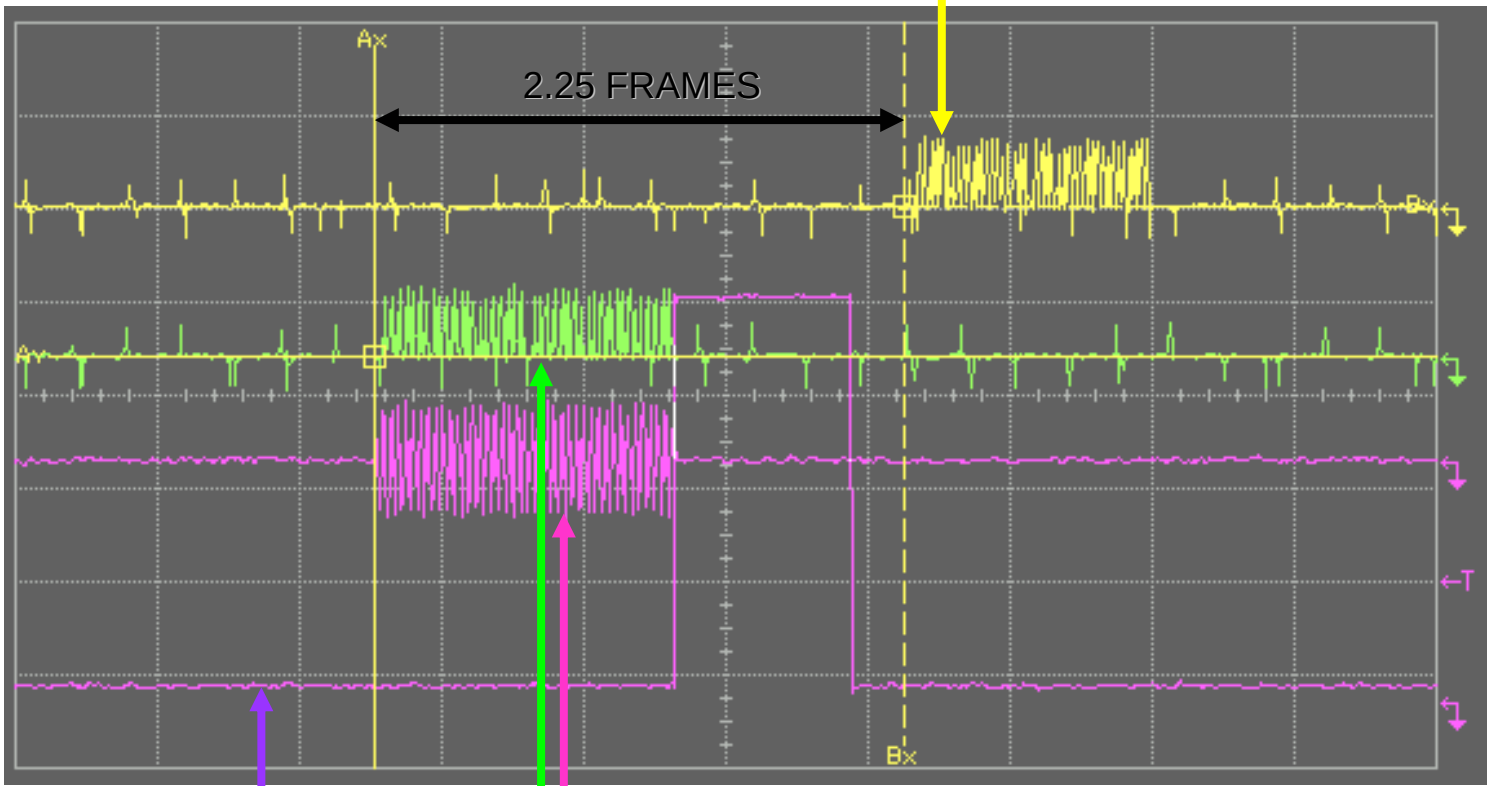
23.98 audio

23.98 video
This is the ‘A’ frame
TC frame count = 00, 04, 08, 12, 16, 20

6 Hz pulse

This example uses 30F NDF timecode

PD LOCK MODE 1

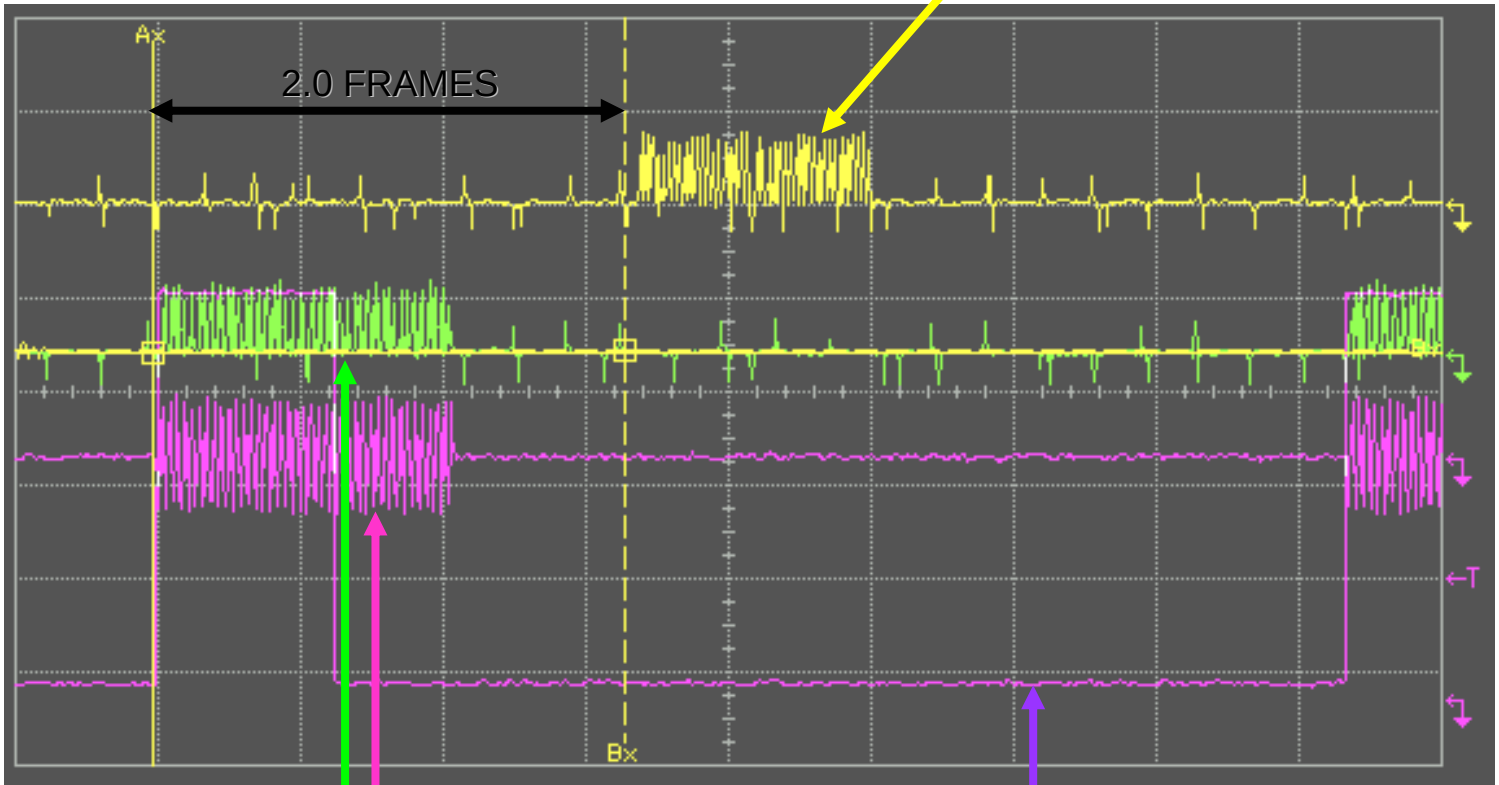

29.97 pulldown video
This is the ‘A’ frame
TC frame count = 00, 05, 10, 15, 20, 25
2.25 FRAMES
Ax
Bx
6 Hz pulse
23.98 audio
23.98 video
This is the ‘A’ frame
TC frame count = 00, 04, 08, 12, 16, 20

This example uses 30F NDF timecode

PD LOCK MODE 2

Maintains a 2 frame offset between Main and PD outputs.
When entering Play the capstan locks to the CTL signal.
Secondly it checks the phase of the 24F TC “A” frame and the 6Hz pulse.
If they do not match then it re-locks the capstan.

29.97 pulldown video
This is the ‘A’ frame
TC frame count = 00, 05, 10, 15, 20, 25



23.98 audio

23.98 video
This is the ‘A’ frame
TC frame count = 00, 04, 08, 12, 16, 20

6 Hz pulse

This example uses 30F NDF timecode

SYSTEM RESETS

1, 5, 9

Power Off the SRW.
Press and Hold the 1, 5, 9 buttons on the number pad.
Power On the SRW.
Keep the 1, 5, 9 buttons depressed until there is a beep.
Release the buttons.
Re-power the SRW.

This will reset the setup menus back to factory.

0, CLR, SET

Power Off the SRW.
Press and Hold the 0, CLR, SET buttons on the number pad.
Power On the SRW.
Keep the 0, CLR, SET buttons depressed until there is a beep.
Release the buttons.
Re-power the SRW.

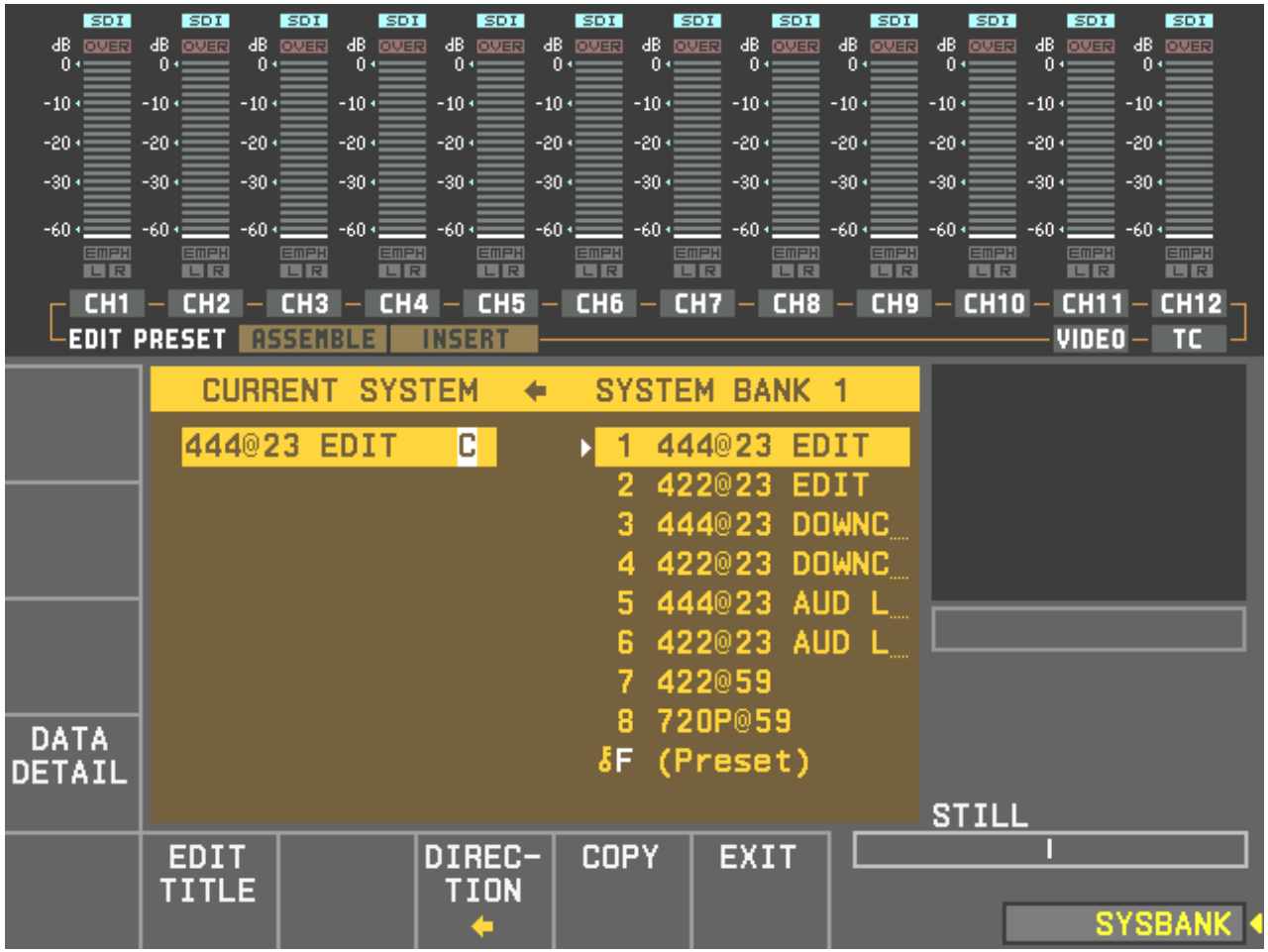
This will reset all the setup menus, all novram data and system settings.

Only perform this reset if 1, 5, 9 does not correctly recover the SRW. Or following a software upgrade.

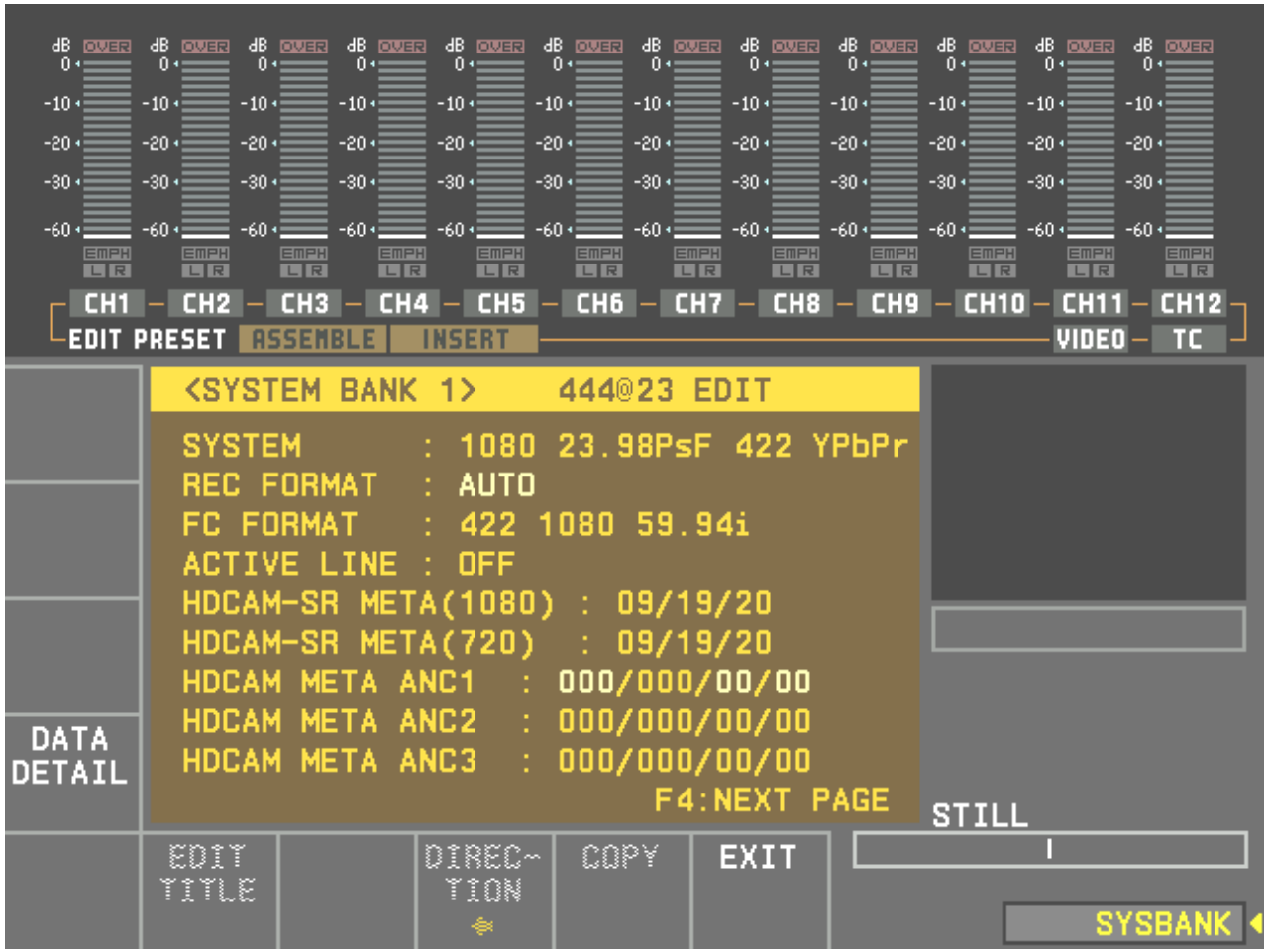
NEW FEATURES FOR

VERSION 3

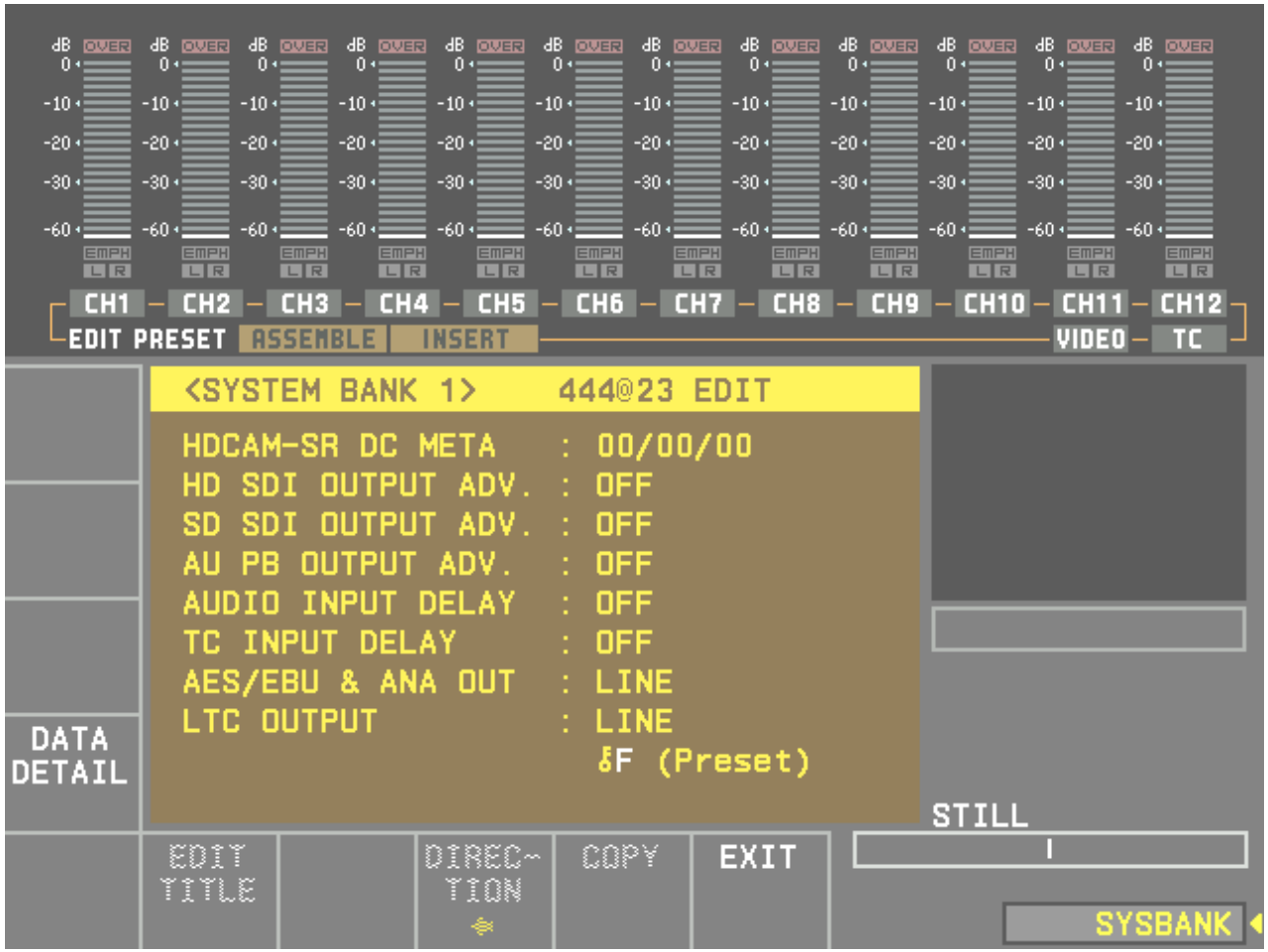
SYSTEM BANK


SDI
dB OVER
0
-10
-20
-30
-60
EMPH
L R
CH1 CH2 CH3 CH4 CH5 CH6 CH7 CH8 CH9 CH10 CH11 CH12
EDIT PRESET
ASSEMBLE
INSERT
VIDEO
TC
CURRENT SYSTEM
SYSTEM BANK 1
444@23 EDIT C
1 444@23 EDIT
2 422@23 EDIT
3 444@23 DOWNC
4 422@23 DOWNC
5 444@23 AUD L
6 422@23 AUD L
7 422@59
8 720P@59
&F (Preset)
DATA DETAIL
STILL
EDIT TITLE
DIREC-TION
COPY
EXIT
SYSBANK

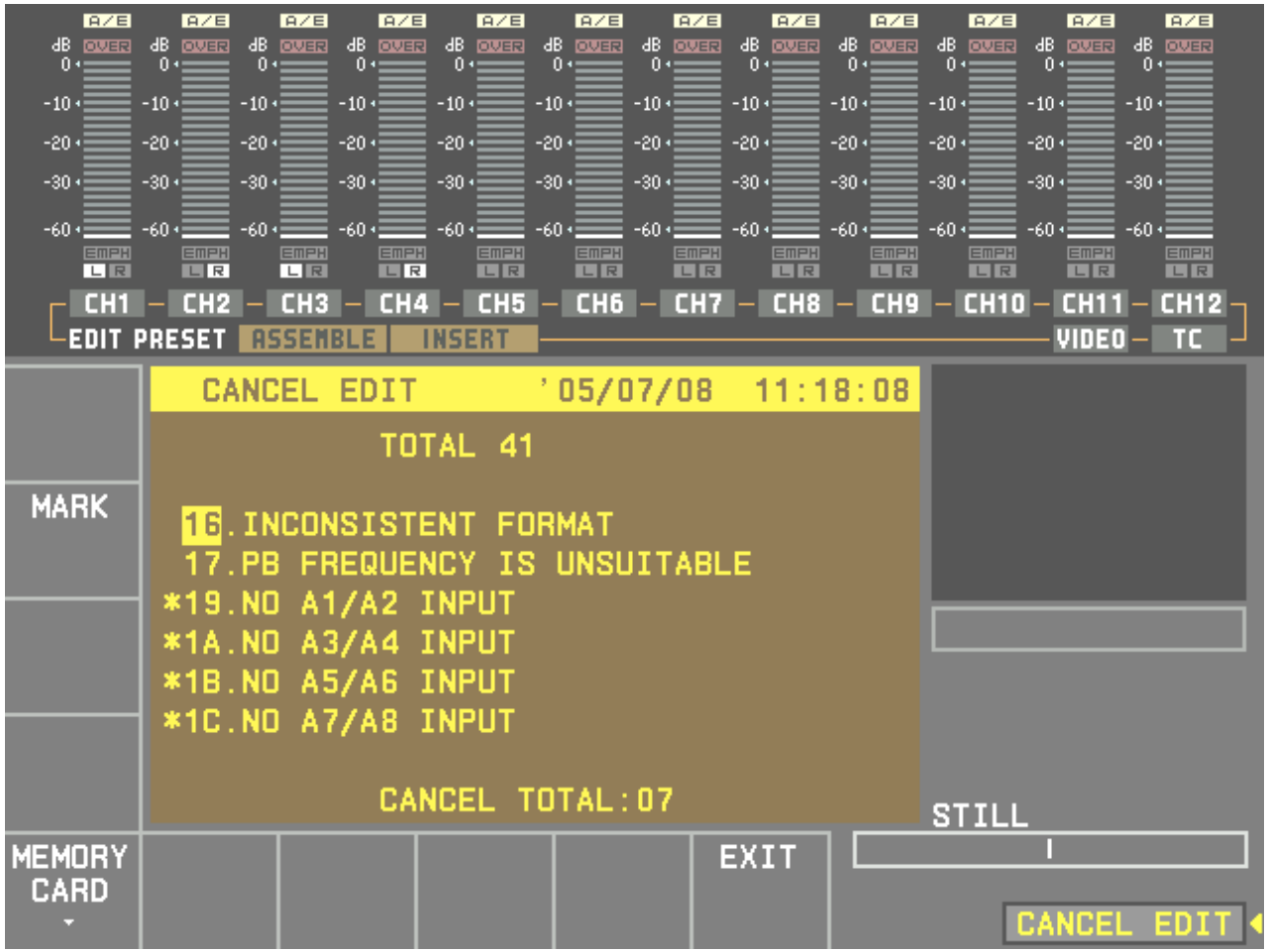
SYSTEM BANK


CH1 CH2 CH3 CH4 CH5 CH6 CH7 CH8 CH9 CH10 CH11 CH12
EDIT PRESET ASSEMBLE INSERT VIDEO TC
<SYSTEM BANK 1> 444@23 EDIT
SYSTEM : 1080 23.98PsF 422 YPbPr
REC FORMAT : AUTO
FC FORMAT : 422 1080 59.94i
ACTIVE LINE : OFF
HDCAM-SR META(1080) : 09/19/20
HDCAM-SR META(720) : 09/19/20
HDCAM META ANC1 : 000/000/00/00
HDCAM META ANC2 : 000/000/00/00
HDCAM META ANC3 : 000/000/00/00
F4:NEXT PAGE
DATA DETAIL
STILL
EDIT TITLE
DIREC-TION
COPY
EXIT
SYSBANK

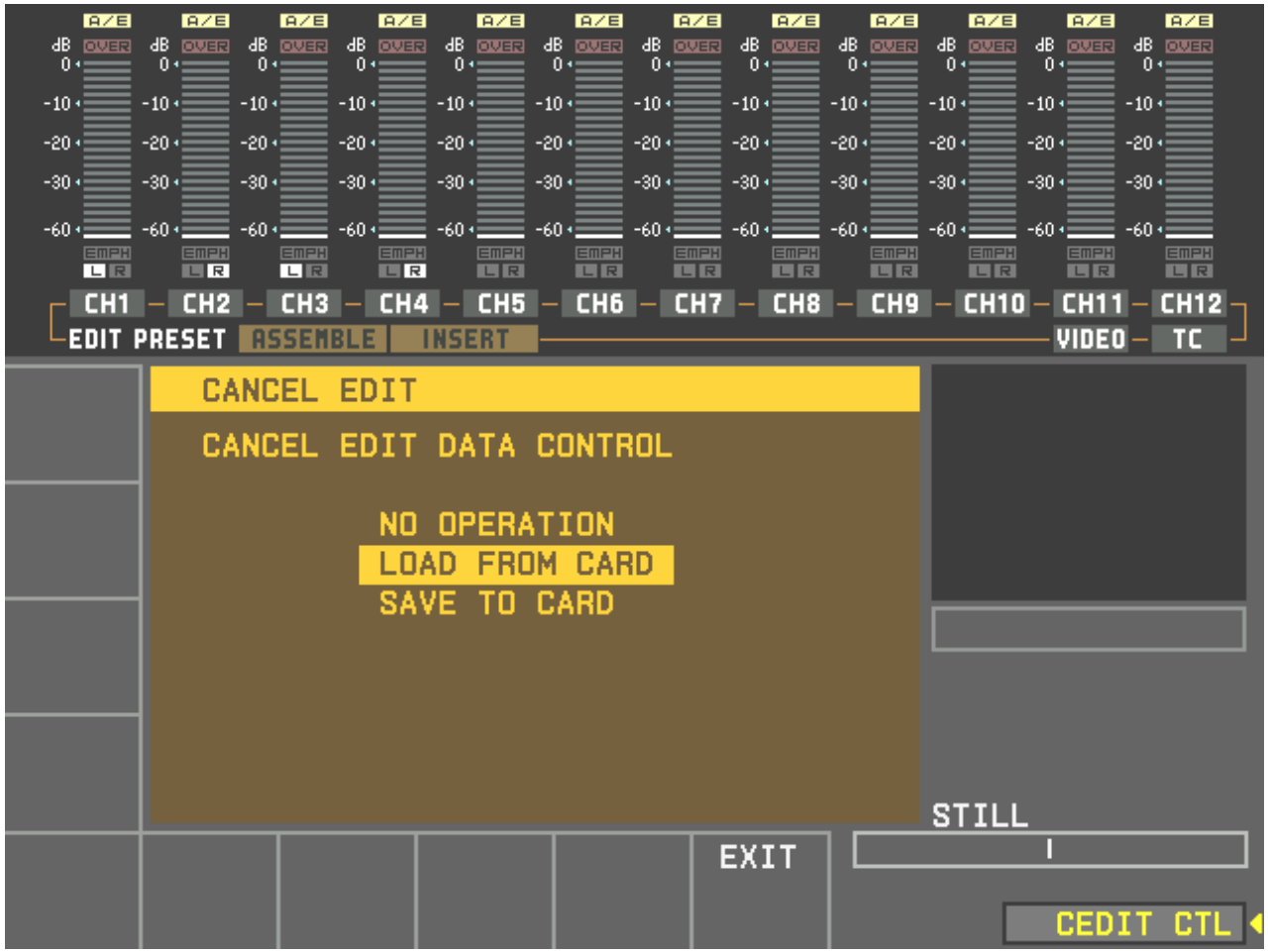
SYSTEM BANK


dB OVER
0
-10
-20
-30
-60
EMPH
L R
CH1 CH2 CH3 CH4 CH5 CH6 CH7 CH8 CH9 CH10 CH11 CH12
EDIT PRESET
ASSEMBLE
INSERT
VIDEO
TC
<SYSTEM BANK 1> 444@23 EDIT
HDCAM-SR DC META : 00/00/00
HD SDI OUTPUT ADV. : OFF
SD SDI OUTPUT ADV. : OFF
AU PB OUTPUT ADV. : OFF
AUDIO INPUT DELAY : OFF
TC INPUT DELAY : OFF
AES/EBU & ANA OUT : LINE
LTC OUTPUT : LINE
&F (Preset)
DATA DETAIL
STILL
EDIT TITLE
DIREC-TION
COPY
EXIT
SYSBANK

ERROR LOG / ALT / CANCEL EDIT MEMORY CARD



ERROR LOG / ALT / CANCEL EDIT MEMORY CARD



4:2:2 → 4:4:4
CONVERSION

Convert HDCAM and HDCAM SR 4:2:2 tapes for 4:4:4 workflow

Recording format	Recording/Playback System mode	Frame rate	HD-SDI output	Format converted HD-SDI output	Down converted D1-SDI output
HDCAM-SR	1080/422	23.98PsF	1080/422/23.98PsF	1080/444/23.98PsF	----*
				1080/422/59.94i	525/59.94i
				720/422/59.94P	525/59.94i
		24PsF	1080/422/24PsF	1080/444/24PsF	----
				1080/422/60i	----
		25PsF	1080/422/25PsF	1080/444/25PsF	625/50i
				720/422/50P	625/50i
		29.97PsF	1080/422/29.97PsF	1080/444/29.97PsF	525/59.94i
				720/422/59.94P	525/59.94i
		30PsF	1080/422/30PsF	1080/444/30PsF	----
		50i	1080/422/50i	1080/444/50i	625/50i
				720/422/50P	625/50i
		59.94i	1080/422/59.94i	1080/444/59.94i	525/59.94i
				720/422/59.94P	525/59.94i
		60i	1080/422/60i	1080/444/60i	----
	1035/422	59.94i	1035/422/59.94i	----	525/59.94i
		60i	1035/422/60i	----	----
	720/422	50P	720/422/50P	1080/422/50i	625/50i
		59.94P	720/422/59.94P	1080/422/59.94i	525/59.94i
	1080/444	23.98PsF	1080/444/23.98PsF	1080/422/23.98PsF	----*
				1080/422/59.94i	525/59.94i
				720/422/59.94P	525/59.94i
		24PsF	1080/444/24PsF	1080/422/24PsF	----
				1080/422/60i	----
		25PsF	1080/444/25PsF	1080/422/25PsF	625/50i
				720/422/50P	625/50i
		29.97PsF	1080/444/29.97PsF	1080/422/29.97PsF	525/59.94i
				720/422/59.94P	525/59.94i
		30PsF	1080/444/30PsF	1080/422/30PsF	----
		50i	1080/444/50i	1080/422/50i	625/50i
				720/422/50P	625/50i
		59.94i	1080/444/59.94i	1080/422/59.94i	525/59.94i
				720/422/59.94P	525/59.94i
		60i	1080/444/60i	1080/422/60i	----

Recording format	Recording/Playback System mode	Frame rate	HD-SDI output	Format converted HD-SDI output	Down converted D1-SDI output
HDCAM	1080/422	23.98PsF	1080/422/23.98PsF	1080/444/23.98PsF	----*
				1080/422/59.94i	525/59.94i
				720/422/59.94P	525/59.94i
		24PsF	1080/422/24PsF	1080/444/24PsF	----
				1080/422/60i	----
		25PsF	1080/422/25PsF	1080/444/25PsF	625/50i
				720/422/50P	625/50i
		29.97PsF	1080/422/29.97PsF	1080/444/29.97PsF	525/59.94i
				720/422/59.94P	525/59.94i
		30PsF	1080/422/30PsF	1080/444/30PsF	----
		50i	1080/422/50i	1080/444/50i	625/50i
				720/422/50P	625/50i
		59.94i	1080/422/59.94i	1080/444/59.94i	525/59.94i
				720/422/59.94P	525/59.94i
		60i	1080/422/60i	1080/444/60i	----
	1035/422	59.94i	1035/422/59.94i	----	525/59.94i
		60i	1035/422/60i	----	----

Recording format	Playback System mode	Frame rate	Up converted HD-SDI output	Format converted HD-SDI output	D1-SDI output
Digital BETACAM	1080/422	50i	1080/422/50i	720/422/50P	625/50i
		59.94i	1080/422/59.94i	720/422/59.94P	525/59.94i
	720/422	50P	720/422/50P	1080/422/50i	625/50i
		59.94P	720/422/59.94P	1080/422/59.94i	525/59.94i

TOTAL = 55 SYSTEMS!

THANK YOU!